

MICHIGAN FARMER.

VOL. IX.

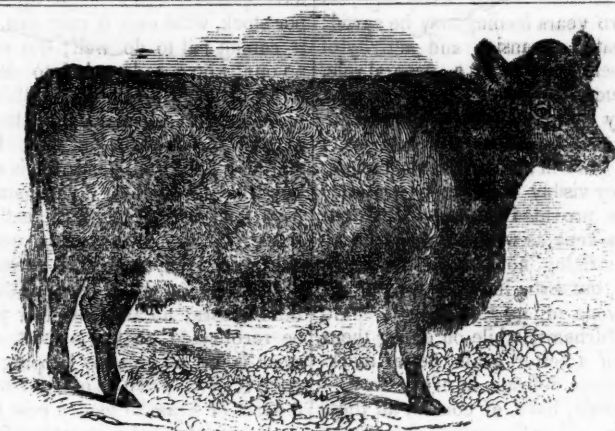
DETROIT, JULY, 1851.

NO. 7, Old Series.

VOL. IX.

WARREN ISHAM, EDITOR.

NO. 1, NEW SERIES.



GALLOWAY COW.

IMPROVED STOCK.

We suppose, and take for granted, that whoever keeps a cow, or raises an ox, does so for *profit*; and the greater the profit he realizes, the better is he pleased. Every one hopes to get something beyond the actual cost of food and attendance, or he would have nothing to do with the business. But this profit varies exceedingly according to circumstances. Whether with respect to milch cows, or working oxen, or cattle for the Butcher, the kind and quantity of food, the shelters afforded in winter, and the breed, but we believe, *most especially the breed*, all increase or diminish the actual profit. Take for instance, one of those miserably attenuated, and melancholy cows, seen too often, wandering and wishing for grass, among the French settlements on the Detroit river; is it possible, by any system of feed and care to make them as large as a two year old Durham heifer? We believe not.—They are of an ancient stock. They have yearly degenerated. Like our ponies, they are but miniatures, if not caricatures of their originally imported ancestors, and by themselves, can never

be rendered of any actual value. Feed them as you will, they never can be anything else than what they are; and no intelligent farmer would think of stocking his farm with such milkless and fleshless cows. They eat very nearly as much, they require as much looking after, they take longer in arriving at maturity, (and when they do, what are they good for?) as the best stock in the country. The only thing that can be said in their favor is that they cost very little to the purchaser, but on the other hand, they bring him just as little profit, whether he keeps them or tries to sell them. Now, let us take this as a starting point. What shall we say of the coarse limbed, thick haired, big headed, small uddered cow, of our ordinary and prevailing breed? It is certainly better than the French; there is more of it in every way—more flesh, but much more bone: and the flesh where it is neither the best nor most wanted; there is more hide, but this can only be sold once, and then at a few cents a pound; there is a trifle more milk, but perhaps only a trifle, considering the better care and food. We are aware that some of the best milkers ever produced in the U. States have been cows of *apparently* common breed; but one swallow does not make a summer; a few

exceptions but confirm the rule; and we say without hesitation, that the great majority of our cows give much less milk and butter than good cows *ought* to give. If we still keep rising, and have the luck to get a good cross with a full bred Durham or Devon, are we any better off? We think decidedly so. There is a finer bone, and yet more flesh; and this flesh better distributed, so as to be not only handsomer in the animal but far more valuable to the Butcher; there is a thinner skin and less hair, so that less nourishment is required to replace the constant waste of these parts. There is greater size and weight; greater maturity at an early age, so that from one to two years feeding may be saved; and, in cows, a greater expansion and activity of the secretory vessels, so that, as a general rule, more milk is produced from the same food; and we have invariably observed, except in rare instances, more of that quietness and easiness of disposition, which, both in man and beast, inclines to fattening. They visibly show their gratitude for the food that is provided them. Or if our improved stock are kept as working oxen, the alteration is just as striking, not only in the points mentioned above, but also, in quickness of action as in the Devons, or in power, high spirit, and vigor as the Durhams; while on eating them, we find the flesh of a better grain, better marked with fat, and more delicate in every way.—The full blood animals, have, of course, all these points in perfection. Now forgetting the two intermediate links, set a French cow or ox along side of the highest bred. The dullest man would instantly see where the profit lay; and it is precisely the same, but in a less degree as we advance to perfection. We do not know yet to what cattle may be brought; every year some improvement is made: and a century hence *our* grand-children may look with as much contempt on our best, as we look on the present French stock; but while we have so many different degrees, there can be no doubt but that the farmer who stocks with the highest bred cattle, will eventually make the most money, at the least cost.—It is stated in the Patent office Report, that in New York, the average produce of cows is \$20 a head per annum; but there is a dairy of 41 cows, which yields \$62 a head a year, or over *three* times the usual quantity. This farmer, of course, annually realizes *three* times the profit of his neighbor's, allowing \$2 a head a year for interest upon higher cost and care. It is believed that in Michigan, our cows will not average even this; but allowing that they do so, the difference between what they *are* and what they *might be*, is the difference between about \$2-000,000 and \$6,000,000 annually lost to our State. Hitherto there has been a sad neglect on this subject in Michigan. One of the most eminent cattle breeders in the United States, who, last year visited the Ann Arbor Fair, could not help remarking the "unimproving spirit" of our Farmers in this respect. But we have been pec-

uliarly situated. Not only has wheat absorbed all our best energies and sucked the strength out of our best lands, but we have had to compete with the cheap cattle from the Indiana and Illinois prairies. But these causes, we trust, have now ceased forever. Few or no cattle are now imported, and Michigan herself is beginning to export largely and at remunerating prices. For the last three years, cattle have decidedly risen in value, and promise to continue doing so.—Stock raising is putting on a new face; and already is, and for a long time must be, one of our most lucrative businesses. Those, therefore, who have spirit enough to begin right and get the proper stock, what ever it may cost, *and take care of it*, cannot fail to do well; but we prophecy that no one, who goes largely into this trade with inferior cattle, will realize anything like what the more enterprising may expect to do. The difference of price to begin with, between common and high bred Bulls and cows, is startling to many; but which is the best investment, that which just pays for food and labor, or that which gives besides, twenty or thirty per cent profit? Even one good Bull, owned in partnership by half a dozen farmers would repay them their outlay in three years; all after is clear profit. It should be recollected, that the cost of keeping poor stock is just as great as keeping good, the difference is in the produce of the two. If it requires 3 acres of grass to feed a cow for a year, and a poor cow gives the average of a half a pail of milk a day, and a good cow a pail and a half, how much better is the farmer paid for his land by the latter!

C. F.

For the Michigan Farmer.

FELLING GIRDLINGS.

Mr. Editor: B. C. Hatch, Esq., of Hanover, Jackson county, employs the following ingenious plan of clearing his oak girdlings, by taking the trees out by the roots. He says he can fall the trees by this means as fast as two men can chop them down. Two men, a boy, and two yoke of oxen are team enough. Provide a good inch rope 100 feet long, attach to one end a short hook made of round inch iron, so that it may form a slipping-noose on the rope, and at the other end a ring to hook a chain into. A light ladder, of sufficient length, is set against the tree; the boy ascends with the hook end of rope and makes a slipping-noose hitch around one of the upper branches; the man at the tree holds the rope tense, while the boy descends it hand-over-hand, sailor-like. A log is placed at the root of the tree, for it to fall across and raise the roots out of the ground. The ring end is passed under a log to hold it down, the team is hitched on and started up; if the tree does not fall, cut away some of the roots at the opposite side, when it soon comes down.

The bodies are soon disposed of. Knock the

dirt off the roots, and pile the stumps; they burn with little trouble.

The same plan may be employed in turning out old stumps. Prepare a stout lever, say 15 feet, with a slight bend 4 or 5 feet from the lower end; set it against the stump, the foot between two large roots; secure it with a good chain double, around the top of the stump, having a rope some 40 feet hitched to the upper end, and almost any stump may be turned out with one team.

H. H. K.

Hanover, March, 1851.

For the Michigan Farmer.

MIXING WHEAT—BAD FLOUR, &C., AGAIN.

MR. EDITOR:—In perusing the May No. of "*Our Paper*," I lit upon an article in which I feel very much interested. Neighbor Cone asks if the Miller is "justifiable in mixing Rye, Smut, Cockle, &c., which slovenly farmers sell to them, with clean wheat brought by other farmers, and then giving them both flour alike?" I would answer unequivocally—No: Yet I would not by any means exculpate the farmers who will raise and offer in market such vile stuff as will greatly depreciate the value or entirely ruin its equal quantity of good clean wheat. Our reputation abroad for wheat growing, suffers unjustly from the slovenliness, heedlessness, and penuriousness of a certain class of men who call themselves *Farmers*, while they are utterly unworthy of the name.

There is no question but Michigan can raise as good wheat as any State in the Union, and that includes the capability of the *whole world*, and it is provoking, aggravating, and degrading, to see, in New York quotations, our flour scratched down *one farthing* below "pure Genesee" or "Richmond City Mills." Perhaps it would be impossible to make those who have fallen into, or rather grown up in such stupid negligence to believe it would be for their *immediate* interest to abandon their bad habits *at once*; but such is the fact. The remark of Junius, that "wheat buyers seldom make difference enough," between clean wheat, and indifferently cleaned, is very true, our millers are *too clever* about it, and I verily believe the remedy is in their hands, and if they would apply it promptly, and severely this year—next year, a great difference would be visible, and in 5 years the evil might be entirely remedied. If they would entirely refuse to buy an article, that would not by itself, make a *good* quality of flour for common use, and dock from 10 to 50 per cent, all that would not, by itself, make superfine flour, they would confer an important benefit on the very ones who need *correction*. I well recollect some years ago of taking wheat to a miller, without having properly cleaned it; the miller looked me right in the face for a moment, and then turned his eye to the wheat, and then again to my face, and then

deliberately and warmly remarked: "I am afraid if I receive wheat in that condition, I shall learn farmers to be lazy." This was more than 20 years ago, and I do not know how he could have read a lesson to me in so few words, that would have done me more good, though at first I was highly offended. Now I would not throw all the responsibility of a renovation upon Millers, but let Merchants, Mechanics, and all who buy or deal in wheat, make more difference in *price*, according to *quality*, and let all who raise wheat understand that the first crop of *clean* wheat that they raise will abundantly repay the extra expenses of obtaining clean seed.

Let those who raise clean wheat organize, and have their wheat manufactured by itself, or sent together to the eastern market, and secure the profits to which they are justly entitled, (according to the suggestion of the editor,) and let millers be rigid with those who offer rye, cockle, chess, sticks and dirt, and call it all wheat, and it will certainly do something towards remedying that extensive evil of which we complain.

—Let every farmer and horticulturist take the Michigan Farmer, and let every subscriber be prompt to

PAY UP.*

Commerce, May 1851.

* Amen.—C. B.

For the Michigan Farmer.

A PROPOSITION.

SUMMERVILLE, CASS CO. }

State Michigan, 16th April 1851. }

MR. ISHAM, Sir:—In my last letter enclosing a recommendation to my friends in Scotland, and advising you to attend to the science of Ploughs and Ploughing while there: I thought to wait a little till I would hear your opinion, but after one of the most vexatious days I ever passed, I am urged to anticipate your remarks, and say a few words on the subject of Ploughs. None but a ploughman can appreciate the vexation produced by a bad Plough, and particularly in *Prairie* soils. Does your Plough scour? is a question that is put several times a day, and is an all-absorbing topic with Farmers having *Prairie* farms. I have now had a *Prairie* farm 6 years under my management, and in that short time have bought no less than 5 ploughs, all of which are very defective in the principle of scouring, or in fact do not scour at all; while their clumsiness, and resistance to the draught, their imperfectness in turning the furrow, and their unmanageableness in deep and shallow ploughing, renders them not only ineffective, but the most annoying and vexatious instruments, that ever a poor mortal was punished with. The Plough I use at present was made at Flowerfield, and commanded the notice of the Michigan Farmer about a year ago, which was the cause of inducing me to buy it, as it was said to scour in *Prairie*. It is the best of those I have tried, but is chiefly indebted to its steel

mould board, but at the same time its unscientific construction defeats the object of scouring, and is altogether, very imperfect and antiquated. To the eye of a foreigner, on his first arrival in this country, there is nothing that strikes his attention so soon as the defectiveness of farming tools; in most other things this country is close on the heels, or in advance of the old country; but in the articles of most farm implements, we are immeasurably behind. It is admitted by all that Scotland produces the best ploughmen in the world. If this be so, is it to be supposed that they could have acquired such celebrity, if they had had no better instrument than the American plough? They never could. It happened that at the time I got my plough, and while I was rubbing and growling, and sweating over the unscourableness of the clumsy thing, that a Scotchman was living at my house, who was a good ploughman in his own country. I told him to try it; he did so, but before he had gone two rods, she was choked full—laboring and wallowing under all sorts of pressure, he merely threw it from him and went off saying, "I would throw the ——— club over the fence." I do not mean to say that the Scotch models would be the best for present American purposes; but I do say that by altering certain points, and giving better symmetry to other parts, a much better, and more efficient instrument can be produced. And I do hereby make the following offer: That if any plough manufacturer will come under an obligation to pay me \$200 as soon as it shall be ascertained that I shall remodel and instruct him how to make a plough that will be more manageable, that will scour under all reasonable circumstances, and in all sorts of soils; with a great diminution of draught, (perhaps as much as one horse in three, or at all events a very great decrease of friction,) and will turn the furrow more effectually at the same depth, than any plough, the invention and manufacture of Michigan, Indiana, or Illinois, in use previous to the year 1841, or probably of the United States, at least of the three States named; and if I do fail in this my performance, I will bind myself by note or otherwise to pay them the sum of \$20, (which I think will be sufficient to remunerate them for their expense and trouble,) if I fail to accomplish what I here propose. The matter may be referred to Mr. Dougherty, of Berrien Co., and Mr. Justus Gage, of Cass Co., both of whom I am unacquainted with, except through the Michigan Farmer; or to any other two that the Editor of the Michigan Farmer may appoint—as I would prefer to throw my improvement upon the public at once. If those favorable to this proposal will deposit small sums with the Editor of the Farmer, to the amount previously stated, made payable according to the foregoing terms; or even a smaller amount, if the superintendent of the Michigan Agricultural Society see fit to constitute me a perpetual member. If any person thinks fit to take up this offer, I should like that

they would come to Niles, or some place near by so that I might have an opportunity of superintending the first production, as also of showing them the defects of the present plough in operation. I have no doubt but I will convince any mechanic of the superiority of my model, if he will only go one round, and allow me to explain.

Farmers who have sandy soils in which there is no adhesion of particles, complain of the excess of scouring, that their ploughs soon wear out, and, strange as it may seem, this effect is caused by the same defect in construction; or in other words, what causes the plough not to scour in Prairies, causes it to scour excessively in sand. My model will in a great measure, obviate this excessive wear. There is no ploughman but what has seen that in ploughing corn-stubble in prairie, when he comes to a piece of sward, that his plough does not turn it, but leaves it on edge; whereas it ought to be laid close against the preceding furrow. If my plough is adopted, Mr. Justus Gage will have the best of the argument so far as regards lapping and laying the furrow square over; with the present plough this cannot be done satisfactorily, as there would always be pieces improperly turned, and the grass sticking up, or otherwise having a ragged appearance.—The whole study in Scotland was to produce the most efficient instrument, with the least possible draught; and they have produced a very neat, and effectual implement, completely overlaying the furrow, so that no grass is seen, and laid over as smooth as if it was cut cheese, from end to end of the furrows unbroken, and to the depth of 7 to 9 inches, with two horses, and will cut deeper if more draught is applied. The objection that would be most likely made against the Scotch plough, would be the small quantity of land they could plough in a day, seldom exceeding 14 acres, and difficulty of working around stumps. Any person wishing information, will have a prompt reply to a Post paid letter. I may ask before closing, if we are prevented by Patents, from using steel as a mould-board.*

Respectfully Yours,

JOHN M. McALLISTER.

* Certainly not—C. B.

Cheap Wash for Cottages of Brick, Stone, Stucco, or Rough-cast.—Take a barrel, and slake half a bushel of fresh lime; then fill the barrel two-thirds full of water, and add 1 bushel of hydraulic cement, or water-lime. Dissolve in water and add three pounds of sulphate of zinc.—The whole should be of the thickness of paint, ready for use with the brush. This wash is improved by the addition of a peck of white sand, stirred in just before using it. The color is a pale stone-color, nearly white.

To make it fawn color, add 1 lb. yellow ochre, 2 lbs. raw umber, 2 lbs. Indian red.

To make it a drab, add 1 lb. Indian red, 1 lb. umber, 1 lb. lampblack.

This wash which we have tested thoroughly,

sets and adheres very firmly to brick-work or stucco, is very durable, and produces a very agreeable effect. — *"Architecture of Country Houses," by Downing.*

For the Michigan Farmer.

ON BEES.—No. 7.

Bees require more air in order to enable them to endure the heat of summer and the cold of winter, than at any other time. If they are kept out in the cold, they need as much air in the winter as in the heat of summer. This subject of ventilation should be particularly attended to. In freezing weather the ventilators should be kept open, and particular attention should be paid, as often as once a week during the winter, to prevent the entrance from being stopped with dead bees or any other substance, allowing a current of air to pass from the mouth or entrance through the ventilators. The vapor, or moisture from their breath, will thus ascend and escape through the ventilators, which would otherwise adhere to the inside of the hive, and in extremely cold weather, form a coat of ice or frost, and as the weather becomes warmer, thaws, runs down upon the comb, causes it to mould and the bees to perish.

Again, the ventilators should be kept open in the warm weather in the summer, otherwise the vital air soon becomes exhausted or nearly so; the inside of the hive so warm and oppressive that the bees cannot work, and often hang out, as it is termed, for a great length of time, notwithstanding there is abundance of room in the hive. In this respect they are probably constituted like unto other insects and animals, and must have fresh air and cannot labor without it. At other seasons of the year when the weather is more mild, when, for instance, the thermometer ranges from 75 to 50 much less is requisite.

It will be found that large quantities of dead bees, gum and other filth and rubbish, will accumulate upon the bottom board during the year, which it will be necessary to clean off in the spring. This should be done quite early—as early perhaps as the fifteenth of March or the first of April. This may be done very conveniently by having one extra bottom board. Remove the one it is proposed to clean first, by cautiously raising the hive, insert the clean or spare one in the place thereof, clean the one just withdrawn and place it under the next hive as we did the extra one, and so on until we have cleaned all we wish.

If it is proposed to remove a portion of the old comb from the hive, this is the proper season of the year to do so. A warm day should be selected, the utmost caution and kindness should be observed. Remove the portion of the hive which it is proposed to clean of the old comb, to a distance of a few feet, leaving the other portion in exactly the spot where the bees have been accustomed to find their hive, place a clean empty hive

upon the top of the remaining one; place the portion from which it is proposed to take the comb, in a convenient position, then commence removing, (with the utmost caution,) the old combs, commencing at that portion of the hive where there is the least number of bees, and as we proceed the bees will collect in one corner of the hive. On removing each sheet of comb, strict watch should be had for her Majesty the Queen, and if discovered, she should be taken in the hand, and placed at the entrance of the hive remaining upon the bottom board at the bee house. If she is not found upon the old comb, she will probably be found amongst the mass of her subjects. After the combs have been removed give the hive a slight jar, (holding it very near the ground,) barely sufficient to disengage the bees. Again search amongst the mass for the queen, in fact, search continually. It will be found that by the time the combs have been removed, the bees will have mostly returned to their former place of residence. What few remain should be slightly disturbed, and they will fly to the hive. It is well to be protected from their stings by placing a veil over the face and gloves upon the hands.

The caps or drawers should be placed upon the hives early in the Spring. It is as well to place them on at the time we clean the bottom boards, or perhaps 3 or 4 weeks later, at which time we should place the upper section or portion intended to cover them over the caps. Place the end of the drawers containing the glass at the side of the hive most convenient of access. They should be examined frequently, for the purpose of ascertaining what progress the bees are making in filling them. This may be done by simply raising the upper section or covering and looking through the glass. As soon as it is discovered that a draw is filled and the combs are finished, which is indicated by their being capped over, they should be removed and empty ones put in their places.

For the Michigan Farmer.

GRUBS IN SHEEP.

Mr. Editor:—I was requested to see a Sheep that was found lying alone, and too weak to stand up. It was in good order, and its owner not knowing what ailed it, surmised that its back was broken. A neighbor looked at it and said that the disease was in its head. He said he had lost a Sheep that acted like this, and that he cut into its nostrils and found worms: He said that he took the next sheep that acted in the same way, and poured the juice of tobacco into its nostrils, and that it is now well. The sheep in question, died while this neighbor was present. He took an axe and cut off the upper portion of the head next to the horns. One grub was found next to the brain; another in one horn, and four more in the other horn. They were about $\frac{1}{4}$ of an inch long and $\frac{1}{4}$ in diameter; of a whitish color, except one, that had dark rings across it; and I suppose

looked different from the others, because it had been there longer. I should steep up tobacco, and use it pretty liberally, if I had a flock of sheep, even supposing they were apparently well. The sheep should lie on its back, one person holding its head still, while another, with a pitcher or spoon, pours the tobacco juice into its nostrils.

WILLIAM.

Bellevue, April 16th.

For the Michigan Farmer.

COARSE MANURE FOR SUMMER-FALLOW -- INQUIRY ANSWERED -- RECEIPTS.

Friend Isham: I shall not have to introduce myself to you by pen and paper, as some of the valuable contributors to the Michigan Farmer sometimes do, for our acquaintance has been of many years' standing.

My plan of using straw manure for wheat crops, is to draw it from the barn as it passes from the machine, directly on to the land intended for wheat the next year.

I take my waggon and cart, with hay rigging on—put on my oxen, for the horses must be used on the machine—put on the straw as it comes from the separator; when loaded, drive off and commence spreading the straw on the farther end of the field. This plan will keep all the straw away from the barn, with less help than it will take to stack it. When left in the yard, it must be drawn out in the spring, when it is saturated with moisture, and of ten times its original weight, besides part of the fertilizing quality having passed off into the brook, and that, perhaps, into the woods, or road, to be lost to all farming purposes. It is much cheaper moved dry, and worth more to the land when leached on the ground where it is to be plowed in, than when half of its strength runs off from the barn-yard, as above shown.—Tea is worth more before it is steeped than the dregs are afterwards.

About six or seven loads to the acre is a good dressing. Let it remain as it was strewn over the ground through the winter and spring. The more stock that runs on it, the better.

In the 7th mo. (July,) turn under deep. Be sure and have a good hand follow the plow, with a manure fork, and place the straw even all along in the furrow, so that the earth of the next one will completely hide it. Harrow it even, soon after plowing, the same direction as the furrows.—Whether it is sheeped or not, this method will make it mellow, and fill up the interstices, and prevent the grass and weeds from springing up. Sheep will do the fallow more good than it will return to them, for I have frequently seen this most useful animal very much emaciated, through endeavors to make them do well in living on earth alone.

The time of sowing I like best is from the 5th to the 15th of 9th mo., (September.) Sow 1½ bushels of clean wheat to the acre. If there is no chess in the seed, nor on the land, I shall have

but little fears about the transmutation that may take place. Then cultivate with a good steel-tooth cultivator both ways. The sod will be so settled down as not to rise up in crossing. I have practised this method for several years, and have been successful in the same. Straw is what is needed on the land of all that raise grain, and what a vast amount there is suffered to go to waste, and is lost where it is much needed and justly due. I retain little more straw about the barn and shed than enough for bedding of the cattle and horses; for it will not take a very large amount of machine straw to winter a whole stock to death, if they are pressed right to it.

FENCE POSTS.

J. C. Allen inquires what kind of oak is most durable for fence posts. Swamp oak is the most lasting of any that I have seen tried or used. I have made use of it for many years for bar posts, gate and fence posts, and I find it will last from 12 to 15 years. White and black oak I have tried, but it is of little use for posts, but is good for rails, so is sassafras, red elm and black ash, either of which will outlast white oak—red elm in particular, is timber of great durability for rails. I find it is the cheapest to get my swamp oak sawed into posts about 3 by 5 inches at the top, and 5 by 6 at the bottom. This is sufficient for a heavy fence. They can be split and hewn on one side, though a log will not make as many as it will sawed.

A CURE FOR COUGH IN HORSES.

Go at this time of the year and cut out the hearts of the green mullen plants; boil them up; pour the juice on oats or other food and let it remain until fully saturated. Let the liquor be made strong. I have never known this to fail of curing a cough. They will eat it readily, for they often eat the mullen in the field for food.

This is what mothers often steep up and give to their bantlings to quiet them, and what is good enough for a baby, will do for a horse.

TO PHYSIC HORSES.

The best remedy that I have tried is to shave off the tamarac bark, boil it an hour or more, pour the liquor on the feed as directed above and this is a first rate remedy, especially in the spring. It will create a good appetite. Try the above and see if it does not prove true in both receipts.

A neighbor recommended to me this spring that I should take 2 spoonfuls of saltpetre, 2 of copperas and 2 of resin. This dissolved and poured on to a half bushel of bran, would be an allowance for a span of horses. I tried it but they did not eat it well.

I will try to say something to blank S. of Grand Rapids on Sugar-making in the next No., if some one else should not in this.

I should like to know of friend N. J. Brown, of Rawsonville, what market he goes to to get 62 cents per bushel for corn, or how he makes 240

bushels of corn worth, at 62¢ cents per bushel, \$856.80. See 74 page of the Farmer.

Respectfully thine,

NATHAN POWER.

AGRICULTURAL GEOLOGY...No. 7.

Lime is an alkaline earth. As an element of soils, it is far less abundant than quartz or felspar. As a chemical agent, it has more power than either. Neutralizing acids is one of the most important agencies of all alkalies. Lime performs that agency both in agriculture and domestic economy. Take a case in the former.—Every farmer is familiar with two kinds of sorrel growing on plowed ground. The most abundant is called sheep-sorrel, and frequently sour-dock. Botanists call it *rumex acetocello*. It frequently covers plowed fields with a thick coat, containing a large amount of acid. By quick-lime this acid is neutralized and changed into salt, probably favorable to vegetation, while the acid is unfavorable. A case in domestic economy—common ashes are the carbonate of potash, as ley is obtained from them. In making soap, the purer the potash the better; especially as it avoids the necessity of putting red-hot horse-shoes into the soap to drive out witches, or even waiting till a new or full moon for making soap. By mixing lime with the ashes, it removes the carbonic acid from the carbonate of lime, leaving the potash a purer and stronger alkali, and more powerful in assimilating the water and oil by uniting with both, which is the chemistry of soap-making.

Lime is also used as an alkaline agent in many of the arts, and with great effect in iron furnaces and glass-making—the coarsest kind of glass; for most kinds, potash or soda is used. Whether in reducing ores to metals, or quartz to glass, lime acts as a flux, causing a more ready fusion. While lime, as a flux, aids the fusion of iron ore, charcoal takes from it the oxygen to aid the combustion. As most iron ores are the oxyds of iron, cast iron still retains a portion of its oxygen, which is removed by further exposure to charcoal as a heating agent. It is thus reduced to wrought iron. By exposing wrought iron to intense heat, while bedded in powdered charcoal in a closed oven, thus entirely excluding air from it, the charcoal or carbon is absorbed in small quantities by the iron, by which wrought iron is changed into steel, which is carburet of iron. Carbonate of iron is an ore of that metal, which is said to be changed from the carbonate to the carburet, or from the ore to steel, by a direct process.

EXPERIMENT: If some pearl-ash (sub-carbonate of potash,) be put into one tumbler, and some copperas (sulphate of iron) into another, and both exposed to the air, one substance will be covered with a white powder, and the other attract moisture so as to become a partial liquid. The one is said to effloresce, the other to deli-

quesce. By trying the experiment, any one can readily ascertain by which operation each is effected.—*Holbrook.*

For the Michigan Farmer.

CHALLENGE ACCEPTED

Mr. Editor: In a horse bill, published by Mr. B. G. Phillips, of Lagrange, Cass Co., there is a Challenge as follows, to wit:—

"I will show 10 colts, dropped this spring, the get of Ivanhoe, at the Kalamazoo County Fair, this fall, against ten colts of the same age, the get of any other horse in the State, for 50 or 100 dollars."

I would inform the lovers and breeders of fine horses, that I have accepted the Challenge; and will exhibit ten colts of the get of my horse, "Bucephalus," against those of "Ivanhoe," according to the above stated challenge; and that the necessary arrangements have already been entered into, and the parties have chosen Walter G. Beckwith and Archibald Jewett, Esquires of Cass Co., and Doctor M. Freeman, of Kalamazoo county, as Judges, upon the merits of the said colts.

I would further state that Mr. Phillips and myself have also agreed to select two colts, each from their 10, at the time of the exhibition to make a trial of speed and bottom, one mile and repeat, in the fall after they shall be three years old, at Schoolcraft, and to be governed by the rules of racing at the Long Island course.

Our object in making these matches is not that which often times induces men to like performances, but for the improvement of the breed of horses, and that *quality* which always has commanded the highest prices—those possessing in the greatest degree, beauty, action and bottom; and the only way in which the same can be entirely ascertained is by a fair comparison.

In making this statement, I would not, in the least, wish to detract from the merits of Ivanhoe, but, on the contrary, consider him a superior horse, of fine blood, beauty and action, which opinion is fully sustained, by the decision of the intelligent Judges upon horses, at the State Fair, held at Detroit, in September, 1849; but not being willing to yield the points in question, and for the benefit of those who are breeders of fine horses, I have accepted the challenge.

In the March number of your paper was published a communication from me, in which I offered to match my horse Bucephalus, against any seed horse in this state, to run 3 miles carrying 150 pounds, in September next on my track, which offer has not been accepted; and in consequence of my horse having sustained an injury in his hip, which may be permanent, by getting out of the stable and jumping against a heavy wagon wheel, I hereby withdraw the said challenge.

I shall, however, train and test the speed and bottom of a number of my three year old colts

next fall and invite public attention to the trial. Several of these colts will be for sale upon fair terms.

ANDREW Y. MOORE.

Schoolcraft, May 5th, 1851.

For the Michigan Farmer.

APPLYING MANURE.

Friend Isham: In accordance with your request, I pen a few thoughts, which are at your disposal. Much has been written upon the best method of applying barnyard manure, whether in an unrotted state or wait for it to rot.—Much, perhaps, depends upon the soil to which it is applied; but with me, upon my soil, (which is what is commonly called a stiff loam,) it has become a fixed principle to clear my yards every spring, and for this I have more than one reason: first, the difference in appearance between a yard well cleaned, and one in which the manure is from one to four feet deep, as I have seen them, is strongly in favor of my practice; secondly, the return of crops from the land to which it is applied, greatly preponderates in favor of my practice, thereby converting what would be a nuisance into a real benefit.

But to my process. Having drawn the manure on to the field, leaving it in suitable heaps in rows through the field, at the proper time I commence plowing by passing through and back in the centre of these rows; then I set the boys to work, and as I pass around with the plows, have the furrows filled half full, according to the compactness of the manure, which the next furrow covers, and thus till the field is done. I treated about four acres in this way last year, which had become much infested with wire or June grass, and which could not be subdued by the ordinary summer fallow system, plowing but once, but that to the depth of at least eight inches; harrowed it well lengthwise of the furrows, marked it out and planted to corn. With the ordinary after culture, the June grass was thoroughly subdued, and the result was from forty-five to fifty bushels corn to the acre, while two acres treated in the same way (except the manure) gave from eight to ten bushels less per acre. This increase of crop I consider clear gain over the system which allows the decomposition to take place in the yard, exposed to all the vicissitudes of weather for from one to five or more years. I find it is now just handsomely rotted, and turns up a fine rich mould, which readily incorporates with the soil, and, in my humble judgment, has not parted with more of its fertilizing properties than if it had rotted in the yard, while those which have left have been absorbed by the soil. Whether this course will answer on all soils I do not presume to say, but only give the facts in my own experience; however, let me say it will never do to thus apply manure with the shallow plowing so common, say from four to six inches.

And now let me call your attention to a remark

in the article of "Wheat Grower," on page 140 of the May No. current volume. He there says: "It is idle for the farmers of Michigan to think of raising beef, pork, butter, cheese, corn, barley, oats," &c.

I think while wheat and wool must be the staple commodities of our State, that our farmers need encouragement in other branches above named, instead of discouragement, and that some of them, especially butter and cheese, do and will pay remunerating prices. Again he says: "A farmer may stand a week in any market out of Detroit and not make a sale." This I think a mistake; butter and cheese have ranged for a year past, in some of the interior towns, above the Detroit prices, and it signifies but little to the farmer whether it be for home consumption or for foreign market. But is not attention to all these branches necessary to ensure success in the wheat business? How are our wheat lands to be kept in condition if we neglect stock? Perhaps "Wheat Grower" may refer me to the Essay on clover; but are we to raise clover solely to enrich the land for wheat, or may we not with a proper rotation of crops raise just as much wheat, and at the same time raise stock, butter and cheese? I believe it is an English maxim, that in order to raise grain it is necessary to have manure, to have manure we must have stock, to have stock we must have hay (clover) and roots; thus a rotation is secured.

Plow Jogger.

Springfield, May 1st, 1851.

GALLS ON HORSES.

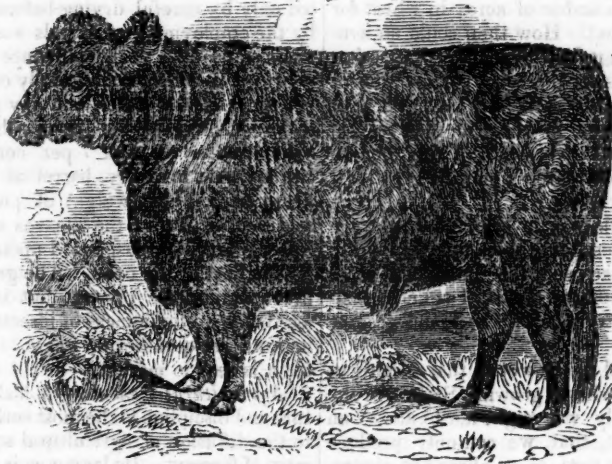
We have been requested to republish the following recipe, and we do so with great pleasure, having the fullest confidence in its efficacy:

More than twenty years ago, when our large ferry-boats were propelled by horse-power, and the horses, by moving round in a circle, were exceedingly liable to be galled by the collar, I learned from the ferrymen the use of alum and whiskey. They bathed the neck and back, and wherever the harness rubbed, with whiskey, into which powdered alum had been put until no more could be dissolved. When a gall occurred constant bathing would secure the continued use of the horse, and actually heal the wound while in service. I resorted to this remedy, carrying it with me when I journeyed, and have continued its use with undiminished approval for more than twenty years. I apply no other remedy. When a horse has been put out for the winter, and has not been used, his breast and back will be tender. A single hour's use of saddle or collar, in a hot day, will then scald the breast so as to produce serious injury. My uniform practice, therefore, has been, for a week before beginning to use the harness, to harden the breast and back by bathing them regularly two or three times a day. No injury has then resulted from the application of the collar. And when a bad gall has actually occurred, a frequent and persevering use of this

remedy has secured the constant use of the animal, and healed the wound while in service.

Should the canal horses, now being called in from their winter's respite, have their breasts har-

dened by one week's previous use of this application, I have entire confidence that a great deal of injury and suffering might be avoided.—*Rural New Yorker.*



LEAN GALLOWAY OX.

The above engraving, and the one on our first page, are from that excellent work, "Youatt and Martin on Cattle," which we have received from the publisher, Mr. Saxton. The following is an extract from this work:

The Galloway is short in the leg, and moderately fine in the shank bones—the happy medium preserved in the leg, which secures hardihood and disposition to fatten. With the same cleanness and shortness of shank, there is no breed so large and muscular above the knee, while there is more room for the deep, broad, and capacious chest.—He is clean, not fine and slender, but well proportioned in the neck and chaps; a thin and delicate neck would not correspond with the broad shoulders, deep chest, and close, compact form of the breed. The neck of the Galloway bull is thick almost to a fault. The head is rather heavy; the eyes are not prominent, and the ears are large, rough, and full of long hairs on the inside.

The Galloway is covered with a loose mellow skin, of medium thickness, which is clothed with long, soft, silky hair. The skin is thinner than that of the Leicestershire, but not so fine as that of the short-horn, but it handles soft and kindly.

The prevailing and fashionable color is black—a few are of a dark brindle brown, and still fewer speckled with white spots, and some of them are of a dun or drab color. Dark colors are uniformly preferred, from the belief that they indicate hardiness of constitution.

The Galloway cows are not good milkers; but

although the quantity of milk is not great, it is rich in quality, and yields a large proportion of butter. A cow that gives from twelve to sixteen quarts per day is considered very superior, and that quantity produces more than a pound and a half of butter. The average, however, of a Galloway cow cannot be reckoned at more than six or eight quarts per day, during the five summer months after feeding her calf. During the next four months she does not give more than half that quantity, and for two or three months she is dry.

For the Michigan Farmer.

AVERAGE OF WHEAT PER ACRE.

BARRY Co., May 1st, 1851.

Mr Editor:—I see by a note in your paper for the present month, a statement that, "by the Report of the Secretary of State, it appears that the wheat crop of Michigan, averaged only a fraction over eight bushels to the acre, for the year before last." I have frequently seen and heard this statement before, and as I believe it to be an entirely incorrect one, I wish to call attention to it. I have not seen the report alluded to, but I know if the Hon. Secretary has made any average for that year, he has done it with singular data. That was the first year that the "Statistical Information," was furnished by the assessors of the different towns to the county Clerks, and the only information which the Secretary of State could have had, that I can find

out, was these reports from the County Clerks. Now let us see how the Assessors took that information. The questions were, "How many acres of land have you in wheat?" and "how many bushels of wheat did you raise last year?" This business was done in May, so that the number of bushels of wheat raised was reported for one year, and the number of acres in wheat for another, viz: the next. How then could an average be obtained, unless indeed, by supposing the number of acres in the two years, to have been the same, which was far from being correct. The number of acres in wheat in that year, in the town in which I live, where I was then an Assessor, was almost three times as great as it had been the year before.

The only possible way in which an average can be had, is by comparing the number of bushels reported last year, with the number of acres reported the year before; and if I am not greatly mistaken, that average will be found greater than eight bushels.

We have boasted to the world, that Michigan is one of the best wheat growing States in the Union, and certainly we ought not to allow an incorrect statement, that we can only produce eight bushels to the acre, to go abroad to contradict the fact.

R. E. TROWBRIDGE.

SCRAPS FROM THE PATENT OFFICE (AGRICULTURAL) REPORT, 1850.

NUMBER I.

Potatoes, at their late prices, are the most expensive kind of farinaceous food. This will be evident from the following statement: Potatoes contain from about 70 to 79 per cent. of water, while the proportion in wheat flour is from 12 to 14 per cent. And while the gluten and albumen in potatoes scarcely rise to 1 per cent, in wheat flour the range may be set down at from 9 to 13 per cent. Again, the non-nitrogenous principles are as about 75 per cent. in wheat flour against 15 or 16 in potatoes. In short, while potatoes supply only 20 per cent. of heat-forming and nutritious principles, taken together, wheat supplies more than 70 per cent. of the former, and more than 10 of the latter. The value of wheat to potatoes, therefore, is at least 4 to 1, or if wheat sells at 15 shillings sterling. (\$3) per cwt. potatoes, to be equally cheap, ought to sell between 3 and 4 shillings (75 to 88 cents.).

Flour. From the results of numerous analyses, I think it may be safely asserted, that of the wheat flour which arrives in England from various parts of the United States, a large proportion is more or less injured during the voyage. The

same remark may be made in regard to many of the samples sent from the Western States to the city of New York. Their nutritive value is considerably impaired, and without more care than usually is exercised, they are entirely unfit for export. The injuries which our breadstuffs sustain by the large proportion of water, can of course be prevented only by careful drying before shipment, and by the employment of barrels secured as imperious as possible to the influence of atmospheric moisture. Wheat flour usually contains about 14 to 15 per cent of water, and any process, in order to be effective, should reduce the proportion of water to 6 or at most 7 per cent. Few would believe that in every barrel of flour, they purchase some 30 lbs. weight of pure water. It is said that in Russia the sheaves of wheat carried into the huts, are suspended upon poles and dried by the heat of the oven. The grain shrinks very much during the process, but is supposed to be less liable to the attacks of insects, and preserves its nutritive qualities for years. During the winter it is sent to market.

Agricultural Schools.—A lack of mental culture and discipline is the most serious impediment to the diffusion of agricultural science among the mass of farmers. Its language is to them an unknown tongue. Hence the most sublime truths in the economy of nature are shut out from the popular understanding. It is feared that this will ever be the case until schools, designed to teach those branches of learning which the practical farmer greatly needs, but does not possess, are established and maintained throughout the United States. So long as we refuse to plant the seed it is folly to expect a rich harvest of knowledge. We over-estimate the value of mere physical strength, like that of the ox or mule, and under-estimate the intrinsic worth of cultivated, well-developed reason, in *practical* agriculture. No inconsiderable degree of mental culture must precede all scientific tillage and husbandry. As a class, farmers have few advantages for being well informed in the rapid progress now making in the economical improvement of soils cultivated plants and domestic animals. This lack of opportunity is a serious misfortune, and leads to this practical result:—With five million farm laborers—two million, seven hundred thousand in the slave-holding, and two million, three hundred thousand in the free States,—American agriculturists so misdirect this immense power of production, that the injury done to one hundred million acres of land, is nearly equal to all the apparent nett profits on the whole rural industry of the country.

War. Such insects as the Hessian and wheat flies, curculios, weevils, army and ball worms, annually destroy crops to the amount of twenty millions of dollars. If a pirate on the high seas, or an Indian savage on the land, injures the property of a citizen to the amount of a few dollars, millions are expended, if need be, to punish the offender. This is right. But when public ene-

mies of a different name, do a thousand times more injury to a whole country, are its citizens under any necessary restraint which forbids their making a common effort to protect their property from insect devastations? Parasitic plants, such as rust on wheat, and many fungi, as well as injurious insects, are on the increase.

Cows. Few are aware how susceptible of improvement is the living machinery which elaborates milk for nearly every family in the Union. There is a reliable account in this Report, of a dairy of 41 cows, kept in the State of New York, which yields \$62 in butter, cheese and milk, as the product of each cow a year. From the returns of the last State census, it is safe to say that one million one hundred thousand cows are milked in that State, which are supposed to yield about \$20 per head. To improve these up to an average annual product of \$31 each, (that is, to one half what the best large dairies in the country now yield,) would add twelve million one hundred thousand dollars to the income of the citizens of a single State. This gain, by the improvement of one kind of rural machinery, would be equivalent to creating a capital of two hundred millions of dollars, and placing the money where it would yield over 6 per cent. in perpetuity.

Sheep. If all the sheep in the United States gave as good returns in wool for the food consumed, as the best one hundred thousand now do, it would add, at least, sixty million pounds to the annual clip. General Washington said, that at the time he entered the public service, in the war of the Revolution, his flock, about 1000, clipped 5 pounds of wool a fleece. Seven years after, when he returned to his estate, his flock had so degenerated, that it gave an average of only two and a half pounds a head, which was the common yield of Virginia sheep then, and is now. It is an old saying that "the master's eye makes the horse fat." Most emphatically it requires the master's mind, as well as the eye, to make wool grow. Washington was eminently "a book farmer," and was anxious to gain knowledge from the educated agriculturists of Europe and of his own country. His overseer believed in keeping sheep as his father did, and was opposed to all innovations in husbandry, (and he made his employer pay two thousand five hundred pounds of wool a year for the luxury of reveling in antiquity, and the pleasure of sneering at improvements.)

Horses. There are not far from six millions of horses and mules in the United States, and it is not too much to say that in a few generations, these animals may be improved full \$30 a head on an average. If so, then the gain by this increase of muscular power, and its greater durability, will be one hundred and eighty millions of dollars.

The Legislatures. There are now some two hundred thousand copies of agricultural papers and periodicals printed, which circulate more or less in every State in the Union. These are doing an invaluable service to the country. They

cannot, however, enact laws for collecting annually reliable statistics of the results of labor and capital employed in agriculture. Truthful statistics form the groundwork of all reforms—of all progress. *State Legislatures must aid in this great work.* If knowledge is power, ignorance is weakness, and the removal of this weakness is one of the highest duties of every republican government. Either the assessors or collectors of state and county taxes should be provided with blanks to collect useful information as well as money from the people.

For the Michigan Farmer.

CURE FOR SHEEP FEVER.

Mr. Editor:—In the March number of the Farmer, Mr. B. Peckham says he hopes to hear from the Sheep breeders of Michigan soon, and adds, I am free to confess that I am severely attacked with the sheep fever, and am anxious to procure the best my means admit of. Now Mr. Editor, as I am a celebrated doctor for the cure of severe attacks of sheep fever, having once been attacked myself in the same way, I know to a mathematical certainty how to cure others and make them stay cured, and as Mr. P. says his attack is a severe one, I will venture to prescribe a cure gratis in his case.

Let Mr. P. go to Vermont and purchase a \$200 buck, bring him home and clip him about the 1st of June, dispose of the fleece, and in one week after if he is not perfectly cured of the sheep fever, he may set me down as a quack and false prophet. Mr. P. will find as others have found before him, that growing gum and animal grease in place of wool, will turn out a poor business, especially when such wool will not bring in market over 25 cents per lb., and clean merinos, 40 cents. Cold water will not wash out the gum and grease of those Vermont sheep; warm water and soap are necessary to remove the animal oil and cleanse the wool, and then the fleeces, (if only one year's growth,) are little, if any heavier than the common merino buck-fleeces.

A. H. W.

For the Michigan Farmer.

CURE OF HOLLOW-HORN.

Take 4 ounces of saltpetre, 2 ounces of alum, and mix together well. Divide this into six parts, and give every other day in their feed. This is a sure cure. I have tried it on my own and neighbors' cattle, with uniform success.

If farmers would put a tea-spoonful of saltpetre in the salt given to cattle once a week, they would seldom be sick. THOS. LACY.*

May 3, 1851.

Spring Wells.

* Mr. Lacy gave us, verbally, another recipe for curing the murrian, but owing to a multiplicity of business we have forgotten what the ingredients were. Will he please to send us the receipt in writing?—C. B.

MANURES.

As most of our farmers probably have the manure of last year still lying in their barn yards, a few words on the subject may not be inappropriate. That a man can make nothing out of nothing, is so plain a proposition, that it appears almost childish to state it; and believe it to be equally true that a very large proportion of those who depend upon agriculture for their living, are continually making the vain endeavor to accomplish this exploit. The end of all farming is to produce from the earth grain, roots, or flesh, for the use of mankind. Now, of all sublunary things, this earth is one of the most liberal, patient, and long suffering under ill treatment; but even it finds an end to its forbearance, and has a limit to its liberality. Or, to speak seriously, of what are plants and animals composed? Chemistry teaches us that they all consist of a few gases, and a few more tangible elements, such as potash, soda, lime, sulphur, phosphorus, chloride, &c. the former of which are partly derived from the air, but the latter entirely from the earth. Now, the stuff we call *soil*, is nothing else than clay, sand, a little decayed vegetable matter, and the inorganic elements above mentioned. Clay, sand, and rotten wood, *while they remain in that state*, serve no other purpose in vegetation, than to hold the plant, give it a seat for its roots, and to some extent serve as a sponge to drink in gases, and water. They do not enter into the elements of plants, except in a very minute degree. All the virtue which the soil possesses in making plants grow, resides in the elements, or inorganic materials, and gases; and just in proportion as they are abundant or deficient, the crop is large or small. Omit one or two of these elements, and no grain whatever can be produced. Give them an abundant and full supply, and the grain can scarcely fail to be good. This is the whole secret of rich and poor land. The former is full of the raw material of plants, which the roots manufacture into grains; the latter has a very small quantity; and as a woollen manufacturer can only make a limited number of yards of cloth out of one bale of wool; so the seed sown can only return a very few seeds more. One of the ends of manure, therefore, is to fill the soil with these elements and gases. All animal manure has been grain or grass; in the animal they undergo a change which renders them *richer*, that is, alters their infinities; makes them better adapted to the use of the plant, and more readily taken up. *This is all*. But every good farmer knows that his manure is valuable, on the contrary, just in proportion to the food that the animals have consumed. Wheat straw contains a very limited quantity of these elements; linseed a very large quantity; and consequently, in England, where this subject is thoroughly and


practically understood, the farmers go to vast expense every year to purchase cake, *not* to fatten their cattle, but to make rich manure. With them one load of such dung, is worth a dozen of our washed-out, sun-scoured, rotten straw.— In the same way, clover ploughed in, plaster, ashes, &c., supply one or more elements in which the land is deficient.

But a few years ago, the celebrated Professor Daubeny, of Oxford, discovered another principle upon which the value of manures depend. In the Botanical Garden under his care, were two beds, one which had remained unmanured for many years, and was very poor; another which was constantly manured, and was very rich.— He analyzed the soil of each, and to his surprise, found scarcely a perceptible difference in their composition and chemical qualities. *How could he account for this?* Only in one way. Altho' the soils were actually alike, the elements were in different conditions. For instance, in the rich border there was no more sand or *silica* than in the other, but it was combined with the potash which rendered it soluble in water and able to be taken up by the roots; while in the poor soil both elements were insoluble and hard; and the roots could not receive them, and thus, with all the other requisite elements. Thence he deduced the principle, which further experiments have proved to be absolutely true, that the difference between new and worn out lands, does not so much consist in the *absolute deficiency* of these elements; as in the want of them, *in a soluble, liquid state*. For instance, when we break up a piece of new land, all these elements are ready for use, and we get a big crop. Each crop, however, carries them away faster than nature can dissolve them, and at last, the land is "worn out." Put the field, then, down to pasture for a few years. It receives nothing but what has sprung from it, therefore no increase; but the air, the rain, the carbonic acid gas, and nitrogen, have gradually dissolved a larger portion than the pasture grass could take up, and the next crop is again a good one. In this respect, then, manures have a different action. In the first mentioned case, they directly supply elements ready dissolved for the roots to feed on. In this case, they act chemically, by rapidly dissolving the elements naturally existing in the ground, and adapting them to the plants. In one year they may dissolve as much as nature would in ten. Such manuring is *cooking the food*. A raw potatoe is not only a very nauseous, but a very unwholesome food. It contains properties almost poisonous to man. But cook it; the heat changes these properties, and it becomes a delicious and nourishing dish. In this way mineral manures, such as lime, plaster, and ashes, and salt, chiefly work, but we are also authorized to believe that even barn-yard manure has the same effect, but to a more limited extent. And this explains a fact which took the Connecticut farmers by surprise, when plaster was first introduced among them, some years

ago. Its natural effect was to increase the crop; and never having learned chemistry, those persons kept plastering heavily, and reaping great benefit, but putting on no other manure. They thought that plaster was itself a *manure* like dung. In a few years, therefore, to their dismay they began to find their land more sterile than ever, and had to return to barn-yard manure.—What had they done? They had put their soil *in the pot and cooked it*. The plants eat heartily and grew fast and quick on such good cheer; but they soon eat up all their food and then began to starve. *Let our Michigan farmers beware of this:* Clover brings up elements from the subsoil, and grows rapidly when stimulated with plaster, and in effect, throws the riches of the subsoil on the surface. But the subsoil is no more inexhaustible than the top earth—and if wheat follows wheat, with a mere clover and plaster crop between, the same result must inevitably, though not so rapidly occur. Virginia is worn out, but only on the top, and many a northern farmer buys lands apparently worthless, puts in a subsoil plough, and reaps the benefit of a new soil, with any manure that the land may ever have received. But if we wear out our *subsoil*, as a harrassing course of wheat, plaster, and clover, inevitably must do; if we apply no other elements, as barn-yard manure, or potash, or lime, or phosphoric acid, renovation of the land is hopeless. At the time of the Revolution, the lands round Albany, N. Y. averaged 40 bushels of wheat to the acre. A farmer now thinks himself lucky if he gets seven; and miles of land once as rich as earth ever presented, are now a wilderness of scrub birch and pine, and the Paradise of the land speculator. It is a sad prospect, but what is to keep our light lands in the interior, from the same fate? Professor Johnston says, "If we plow in only the vegetable matter which the land itself produces, and carry off occasional crops of corn, the time will ultimately come when any soil thus treated, will cease to yield remunerating crops. Though by skillful green manuring waste land may be brought to a remunerative state of fertility, it will finally relapse again into a state of nature, if no other methods are subsequently adopted for maintaining its productiveness. Indeed we consider the reckless use of clover, plaster and wheat, however profitable at the moment, as the most entire spendthrift system. Virginia consumed the interest, and there stopped; we are consuming principal and interest together, and leaving nothing at all for our heirs.—"

"Be wise in time, 'tis folly to delay!"

C. F.

 The increase of inhabitants, during the last 10 years, in the free States, is equal to 39 per cent; of free inhabitants in the slave State is 30 per cent. The increase of slaves in the south is equal to 27,8 per cent.

For the Michigan Farmer.

Mr. Editor: As one of the numerous readers of your highly interesting paper, the "Michigan Farmer," I have been not a little amused and interested in its perusal. Indeed, so much to my mind, and so ably conducted is it, that I have no fault to find—or at least none with the editor. Every number is full of interesting and useful matter; in the No. for May, I find many well written pieces—one upon corn culture, on page 154. But I should have liked it better if Wolverine had stated how he plastered his corn, whether by sowing broadcast, or by dropping it on the hill; for in my opinion there is an essential difference in the two modes—sowing broadcast, I think, deserving the preference.

Now, if one of the essential objects to be gained in publishing an agricultural paper, be the dissemination of the experience of practical farmers, and the *modus operandi* by which they arrive at certain results, then let us have all the particulars in any way connected with the case.

I see quite an inquiry concerning timber for fence posts. My experience in the matter would give a preference to white oak, split or sawed out of middle-sized trees, as the best to be had in this part of the country, or in any other where cedar cannot be procured. I have now standing a fence apparently as solid as when first put up, over thirteen years ago; the posts are white oak, split out of such trees as above. The end put in the ground was not charred, as one of your correspondents recommends, neither was there any attention paid in setting them, whether top or butt end was down, not regarding that as of any consequence.

I would farther say, that I am much pleased with the Educational and the Ladies' Departments of the Farmer. I should like to hear often from the friends of education. Too little attention is paid to the education of our children.—They are to become the recipients of our duties—they are to guide the ship of State, and should learn to control her motions, and what is more important than all, they should know how to govern themselves.

Yours truly,

A.P.Y.

Romulus, May 17th, '51.

PENFIELD'S STOVE AND IMPLEMENT STORE.—

We noticed to-day, some noble plows at this Store, from Ruggles & Co., Mass.,

These implements are an honor to our agricultural artists, and no farmer should think of using the "terrible" things, found all over the country if he is in reach of these improved plows.—Messrs. Penfield's have an extensive assortment of plows, churns, and all kinds of agricultural tools, and an endless variety of stoves, &c.—Farmers will do well to call on them.—C. B.

Educational Department.

For the Michigan Farmer.
COMMON SCHOOLS.

WHITE LAKE, April, 1851.

Editor Michigan Farmer: I send you a few lines on the subject of Common Schools. That they are not, generally, what they ought to be, every one will admit, yet there are but few who will make an effort for their improvement. True, our State is comparatively in its infancy, and many obstacles are to be overcome which do not exist in older and more thickly settled States; but our people generally, have a desire to educate their children, to provide good school houses and good teachers, and to have our schools take a more elevated stand. All this can easily be effected by the well-directed efforts of the friends of the cause.

The large amount of land held by speculators in many of our districts, renders it almost impossible to sustain a school of great value therein; but this evil is lessening yearly, and under a judicious system of free schools, it would be almost entirely removed.

One great evil exists in almost all of our schools, in the great variety of books employed. It is not uncommon to find six or seven different sorts of reading books, two of spelling books, perhaps three of grammar, and almost every sort of arithmetic extant. The importance of enabling a teacher to arrange his scholars in classes, is admitted by every one, and is specially worthy the attention of parents.

Another thing: too much indifference is generally manifested by parents, in regard to visiting their schools; the majority, in almost every district, avoiding the school-house as much as though it was a criminal offense to visit one.

Respectfully yours,

CONSUELO.

TO PARENTS.

One great obstacle which tends to retard the progress of intellectual training in school, is the want of a constant and punctual attendance. It is too frequently the case that boys and girls are sent to school when they have nothing to do at home, and the school-room being the most convenient place to send them, *there* they must go to be "out of the way." Then of course they are sent one day and kept at home the next, as circumstances will admit, and not as the real benefit of the children requires. A very little reflection will satisfy any one that this course is injurious both to children and school. The absentee not only loses by it, but it has a deleterious influence over the whole class, as they are in advance of him, and he is unprepared to recite, by the loss of the previous lessons; and his disconnected and lifeless answers become an impediment to the whole school. It is impossible for any teach-

er to impart new light to these comet-like pupils—comet-like, for they appear and disappear, and no mathematician can calculate their re-appearance.

Parents should remember that it is impossible for teachers to advance their children, unless they secure a constant attendance. Let as strenuous efforts be made to secure a regular attendance at school, as some make to have their children attend balls and dancing schools, and we feel assured that rain or snow would not cause so many vacant seats in our school-rooms.

There is another habit too prevalent among parents, of listening to all the trifling complaints of children, and censuring the teacher in their presence, which tends directly to impair his influence in the school-room. Many are unconscious of the influence they exert, by confiding in all the trifling troubles, and sympathizing in all the wrongs to which they may or may not have been subject. Children are so easily biased, and so often fancy and say things which exist only in imagination, that giving any encouragement, either by silent or open consent, should be strongly guarded against, for it is not only derogatory to the good of the school, but is forming in children habits that will annoy them through life. Probably but few are aware of the nature and extent of the influence they exert, directly or indirectly, upon their children, who are such creatures of imitation that they endeavor to utter the same sentiments they hear advanced at the fireside.

We do not wish to convey the idea that teachers are always in the right, or that they always do things in the most prudent manner. They are but *human beings*, and like every other class of men are possessed of human frailties. There is, probably, no other person whose actions are so closely scanned and so grossly misrepresented, as those of the teacher. He may pursue that course which his experience dictates, and an interest in the welfare of his children prompts him to do, yet he is, perhaps, censured by one family as being too severe with their children—by another, as being too lax—or by a third, as being partial; by one parent, as urging upon their children too many studies—by another, too few.

From what cause does this complaint of parents proceed? From being frequently at the school-room?—by no means; but from the exaggerated statements of interested individuals—from the pupils themselves. And many a teacher, before he is aware of it, is tried, and found guilty, and almost executed, without a chance of self-defence, and no doubt unconscious of any deviations for which he has been so unjustly treated.

But, says one, is the teacher always in the right, and children in the wrong? Undoubtedly not, for, as we have stated before, he has his frailties. But if parents think the teacher has done wrong, would it not be better to go directly to him, and in a spirit of kindness make known their feelings, than to expose him to the public gaze and scandal, when no injustice to their

children was intended or committed? If any parties should labor with united heart and hand, it certainly should be parents and teachers. Their main object should be to train up and educate their children, that they may become useful and intelligent members of society.—*Tecumseh Herald*.

Ladies' Department.

For the Michigan Farmer.

YOUNG LADIES AND MISSES.

Ash Grove, March 29.

Besides suggesting the propriety of selecting suitable colors when you buy clothing, I would give a few hints in regard to the materials. Be not parsimonious. My neighbor, Martha, (who by the way, is not over-nice in anything,) once said she meant to have a "fine dress," she always liked to see them, but "the trimmings cost so much!" Whereupon she purchased a beautiful Marino, but took trimmings far inferior to it. She concluded she might as well have them for she "got 'em for almost nothing." It so happened that she was not skilled in using the needle; but in her own phraseology, she could not afford "to have a mantemaker," for she had paid so much for the dress. In this economical mood, she put it together herself, well satisfied, because it was new and cost twelve dollars.

Now, my dear friends, you must not scowl, and say among yourselves, "That is some extravagant old maid," for in truth, I hope I am not guilty of being extravagant, and as for old-maidism, I have scarcely arrived at the "first turning point," although I entertain a high respect for the sisterhood. I only wanted to remark that I thought a dress better not be trimmed, than spoiled by something inappropriate. Perhaps you never saw an elegant silk dress ornamented with cheap cotton fringe; or a fine white one trimmed with two-penny cotton edging, with a gold watch dangling at the belt. I hope I never shall again. How much prettier a plain calico is, than such an one! Do not suppose that I condemn the use of cotton edgings—not at all. I like them in their place, and consider French embroidered, or home worked edgings very elegant, quite nice enough to trim dresses; but I do not like to see cotton lace on linen handkerchiefs. It were better to put linen lace on cotton handkerchiefs. Do not however attempt a nicety you do not sustain. It is only a too great

fondness for finery, which induces some to commit such follies. Remember that "simplicity is elegance." You cannot make up the lack of intelligence and knowledge, by a profusion of dress. And if you wish to appear in elegant attire, you need not be anxious to wear many laces, or ribbands, or flowers; but let what you do wear be respectably good.

A nice bonnet adds much to the appearance of a lady in the street. Some good people do not seem to remember this. I would not recommend one, *fixed up* with flowers and laces, and ribbands, all at once. Too much trimming spoils a hat. Flowers are very pretty, but too much ribband with them spoils the charm. Always wear a clean bonnet. If you cannot afford to buy new ribbands, keep your old ones in order, even if you are obliged to wash them. A lady is never in good taste if she wears a shabby hat—let her dress and shawl be ever so nice. If shabby bonnets are horrible, so are soiled and ragged gloves and shoes. Keep your gloves mended, and do not sit chewing them during church service. If I desired to practice economy, I should not follow the example of ladies whom I have seen, who walk out in fine slippers a mile or two, and cull flowers with new gloves on. It is shocking to see such an abuse of money, (which is nowhere very plenty,) besides, a lady cannot walk thus slippered but few hours during the most pleasant summer days, without risking her health. It is the mark of a lady to be always clad according to the circumstance in which she is placed. She would not dress in Satin to go on her missions of charity, or show her beautiful parasol by spreading it when the sun was not shining. When travelling, she would not display her jewelry, either by putting her finger rings outside her gloves, (as I have seen) or wearing a whole box full of trappings at the breakfast table. Neither would she be seen walking in the rain, in full dress, unless having been caught out accidentally, and then she would not draggle her clothes, out of false modesty. She would put aside her green veil, if she saw she was meeting an acquaintance, and that without reluctance. She would also dress according to the weather, not appearing in worsted on a sultry summer day, or light muslin, on a shivering cold morning. Nor would she travel in light colored shoes, or equip herself in white for a ride. Specimens of this kind have passed my home on a Fourth of July morning, but by night-fall, have returned all drenched in rain and mud—shocking!

Erratum—In my first letter—last paragraph, and second line, substitute "tight" for the word light.

KATE.

MICHIGAN FARMER.

EDITORIAL CORRESPONDENCE.

Warren Isham, Editor.

DETROIT, JULY, 1851.

NEW VOLUME,

This No. commences Vol. 2d, of New Series. Within the past year, the subject of wheat growing has been pretty thoroughly investigated and discussed. The readers of the "Farmer" have become acquainted with the views and practices of some of the best farmers in the West, not only upon the subject of wheat growing, but upon almost every subject of agricultural interest.

The subject of improving our stock of horses and cattle, is, no doubt, deserving of more attention than it has heretofore received, and we hope that correspondents who have had experience, and who are engaged in improving their stock, will communicate freely with the "Farmer," on this important subject.

The subject of *manures* and *manuring*, are matters which cannot be alluded to, too often.—The use of *muck*, of which we have such an abundance, in this State, deserves especial consideration and trial.

*To Subscribers in Arrears—Dear Friends:—*Promises which have been made to you in reference to the character of the Farmer, have been fulfilled to the very letter; you have read the paper, many of you, three years, without paying one cent—not your own paper, in any sense, but that of those who have paid up. Now, we are not of that class who can beg or coax, but we ask each one in arrears, in a manly way to pay for what they have had. The character of the "Michigan Farmer," is established; its virtues known; its reputation for practical worth shall be sustained; and now friends, "*if you like the security,*" send along "*the dust.*"—C. B.

Hydraulic Churn.—We witnessed this morning the operation of this new churn. It is very cheap, and simple in its construction, and we should think not liable to get out of repair. The usual time required for churning is 15 to 25 minutes. The operation this morning, with *sweet cream*, continued about 23 minutes. The gentleman who has the right for this State, will soon commence traveling, for the purpose of introducing his churn among our farmers. There is no iron about the churn, consequently there will be no iron-rust to trouble, nor necessity for oil. We shall give a drawing in our next No.—C. B.

NUMBER I.

CROSSING THE ATLANTIC.

BRISTOL CHANNEL, May 28th 1851.

You may have wondered, that so much time should elapse before any tidings should reach you from me, this side the Atlantic. In making arrangements for my passage in New York, I hesitated much, whether to take a steamer, or one of the packet ships. The small difference in price was no consideration, the sailing packets having meanly taken advantage of what they supposed would be the rush to the world's fair, to raise their price about one-third, while the steamers took passengers at their usual rates. I had at one time, my passage engaged upon a steamer, but through the advice of friends who had crossed in both steamers and packets, and who assured me that there was no such thing as sleeping upon a steamer, or being comfortable in any way, if the weather was at all rough, I changed my purpose, and embarked upon a British packet-ship for Bristol. I found that I should have quite as good company as upon the steamer.

I have had what would have been, for the most part, a very pleasant, though somewhat protracted voyage, had I not been afflicted throughout the whole of it with severe illness. When I left N. York, I had not been in better health for years, and joyfully did I welcome the day fixed for our departure. I had provided as the companions of my voyage those great agricultural chemists, Davy, Chaptal and Boussingault, and that insufferable chatter-box, Dickens, (conceited, travelled fool!) &c., &c., together with port folio, pen and ink, some quires of paper, and all the et ceteras of a regular campaign, scarcely dreaming of an hour's interruption upon the whole voyage.

But scarcely had the shores of my beloved country faded upon my vision, when I was necessitated to betake myself to my berth, and for ten days I never rose, except to have my bed made, nor took any nourishment, except to sip a little gruel, and even that would not be long upon my stomach, nor has it been much better since.—It was sea-sickness at first, and then soon followed a general derangement of the billiary organs, occasioned by violent vomiting, such as brought me to the verge of the grave in the fall of 1847. It was almost impossible to get medicine to take effect, and it seemed inevitable, at one time, that

I should find a grave beneath the billows, or linger only to die upon a far foreign shore. But medicine finally prevailed, (though nothing short of a thorough mercurial course), and I became so far relieved as to be able to be about the ship more or less during the remainder of the passage; though suffering much, I am now slowly convalescent, and anticipate better health, after my recovery, than I enjoyed before. I shall not dare to venture to the world's Fair, until I am better than I am now.

I shall ever dread sea voyages after this, but there are two still before me which I cannot avoid. My visit to Egypt and Eastern Asia, I cannot dispense with, and that, with my return to my native land, will probably end all my troubles at Sea, should indeed, that kind Providence which has been over me hitherto, sustain and carry me through.

When first taken down, the thought of being in such a situation among strangers, and on ship-board, too, when few comforts can be had at best, was distressing enough. But I did not languish long in this condition before the voice of human kindness fell sweetly, (O how sweetly!) upon my ear, and I found that I had not to go all the way across the Atlantic to be recognized as a blood relation by those of different Nations, languages and tongues.

"You are very sick, sir—can I do anything for you?" said a voice, in tones sweet as ever fell from an angel's lips, and there stood the being who uttered it, and who seemed almost like a messenger sent from another world; and during the entire voyage he continued his kind attentions. When first I opened my eyes in the morning, he was at my bed-side, and at frequent intervals through the day, he was there with his smiling face, and cheerful voice, and helping hand and those last words, as he retired to rest late at night, "a good night—rest to you, sir;" O how sweetly did they vibrate through all my soul!—He was an Englishman.

On one of those gloomy days, as I lay, in my infantile weakness, wrapped in dreamy slumber, raising with considerable effort, my heavy eyelids, I beheld a form bending over me with a countenance lit up with the sympathies of a noble soul. It was a young man of twenty-five, his words were in broken English, and scarcely intelligible, but more musical to my ear than would have been the most polished periods of native tongue. He inquired how I was, and said that he had provided some of the choicest brandies and wines, oranges, lemons, &c., as an antidote to sea-sickness, and that anything he had was at my service. His generous sympathies were all that could be of any use to me then, but when my disease had passed the crisis, his wines and brandies, were of essential service in restoring my wasted strength. Finding that I designed visiting the continent, and having learned what

was the object of my visit, he invited and urged me to spend the next winter at his father's Castle in Germany, where he has a farm of 5,000 acres on which are three hundred horses, three thousand head of cattle, &c. Upon inquiry, I learned that his father is a German nobleman, of immense wealth, and considerable notoriety as a Statesman, having acted in the capacity of Prime Minister to the King of Prussia. Accompanying him was a young man from Amsterdam, who was equally kind and attentive, and who invited me to visit Amsterdam, and offered to accompany me over the different parts of Holland. They are cousins, and had been travelling together for two years in the United States.

I have no thought of turning aside from the great object of my visit to Europe, to lounge away my time at castles, but I have no doubt that these are fortunate acquaintances for me, considered in subservience to the accomplishment of that object. The young man first spoken of, spends most of his time at Paris, and he has made me promise to be at Paris in October, the Vintage season in France; when he will accompany me to different parts of the vine-growing sections of that country, and as he is well versed in the French language, and understands all the dialects of the country, he will doubtless be of great service to me. He also offers to accompany me to Berlin, the capital of Prussia and to Vienna, the capital of Austria, in both of which places he has resided, his father owning property there, and on to Italy, and that is a route which I had designed to take. He had studied all the different professions, simply as an accomplishment, and was of essential service to me by his medical skill.

Nor are these the only pleasant reminiscences connected with the kindness shown in my sickness, by persons of different countries. A gentleman and his lady from the Canary Islands, (Spanish) who performed many little offices of kindness for me, will long be cherished in grateful remembrance.

First glimpse of England.—The first glimpse I had of England, was Sandy Island, situated at the entrance of this channel, which is a solid rock, rising abruptly out of the ocean, to the height of 500 feet, and about 3 miles long by $1\frac{1}{2}$ broad, surmounted upon its highest elevation by a light house, the top of the Island being covered by soil, which is cultivated by its occupant and owner, who is also proprietor of the light-house. (All the light-houses upon the English coast, except the Eddy Stone, being private property, for the benefit of which, each vessel passing in and out, has to pay an enormous toll.)

Soon appeared in the blue distance upon the right, the mountains of Cornwall, terminating in Land's End, the South-western extremity of England, and farther up was dimly seen the coast of Devonshire.

We are now passing up the Bristol channel—upon our right rise the verdant hills of Devon—

shire, and Somersetshire, and upon our left is presented a gentle slope, which seems to extend back for miles, without much elevation, its green fields being partitioned off by hedges, and occupied by flocks and herds;—it is Wales, whose mountains rise to view in the back-ground, and a little farther up the channel, push their bold front to the water's edge. O ravishing sight, to eyes so long unused to look abroad upon the green earth, smiling in freshness and beauty, under the hand of cultivation!

I send you a few letters which I have written at intervals, upon my voyage, as my strength would admit. They have been penned in great weakness and no inconsiderable degree of pain, but have served to beguile the tedium of our long passage.

Respectfully yours,

WARREN ISHAM.

P. S. And here we are, at the mouth of the Avon, on which stands Bristol, 5 miles up—the narrow, "slow-winding Avon," not more than 10 rods across,—on the right and left bank, are hundreds of sheep, nibbling the green herbage, and back lies field after field, rising in the distance by an easy and graceful slope, into a delightful range of high lands, all covered with verdure, while, to the north, on the opposite side of the channel we have just left, rise from the water's edge the mountains of Wales, cultivated to their very summits. But, here comes an iron river-steamer, (a little, narrow, sharp-pointed thing,) and floats by us like a fish, and there comes another and another, and another—some going one way and some the other, and frequently passing us with great difficulty. And *there* is an orchard of young and thrifty apple trees, nicely trimmed and limed, a lovely spectacle, often seen in our own country. And here rise the ledges almost perpendicularly upon each side of the river, to an immense height, and there stands perched upon them, Clifton, regarded, altogether, as the most romantic place in all England, the village, or city, rising from tide water, street after street, to the very summit, one row of buildings peering above, and overlooking another. It is a great watering place. But I must stop again. W. I.

NUMBER II.

CROSSING THE ATLANTIC.

A STORM UPON THE SEA.

I have been so tumbled over and mixed up, since I have been upon the ocean, that I know not whether I shall be able to get out an idea right side up. "Life on the ocean wave," is very pretty in the parlor—very, *very*. And I confess, that with all the sombre shades which I had supposed to pertain to the reality, my fond imagination had clothed it with not a little of the romantic and delightful.

I had been tossed up and down the rather large fish ponds which border our beautiful peninsula, and had enjoyed the wild sport of their truant waters, as they played responsive to the storm.

I had dashed along the Atlantic coast, and had witnessed the play of the elements off those fearful capes which are the terror of the mariner. But I had a desire to look farther abroad upon this vast reservoir of waters—to get out upon its heaving bosom, and, far away from coast or Island against which to be dashed—see old Ocean, lashing himself into fury, shaking his hoary locks, and roaring in terrible wrath.

Is there wrong in the indulgence of such a desire? In a well built and well managed vessel, in mid-ocean, there is little to be apprehended—and then, where else, in all this little world of ours can be witnessed such a display of the wonders of creation? And what tho', in the prosecution of the great ends of life, we should find a grave beneath the billows—could we not sleep as sweetly there, as beneath the clods of the valley—aye, and wake as readily, and rise as triumphantly, in the resurrection morn, at the sound of the last trumpet? We speak of "the pearly deep," but gems far more precious than pearls, will then be brought up from ocean's depth's, to glitter in the diadem of the Saviour.

Well, I have had my desire, I have witnessed a storm upon the ocean, in all its dreadful fury, and am satisfied—fully, and, were my poor powers of description equal to the task, you should witness it too. They would stagger under the attempt, but I will try to give you some faint glimpses of it as it was.

Imagine then one of the finest mornings which ever rose upon the world, clear, serene, delightful. How placidly sleeps the mighty deep beneath the bright beams of the rising sun! How gently beams its broad bosom, as it rests in its quiet slumbers, and how sweetly the soft and mellow breeze plays upon and kisses its many dimpled cheek! Gentle, lovely ocean, how like a lamb thou art! And thou sweet, soft, sighing zephyr, how like those, methinks, which fanned the walks of Eden! But look yonder,—see the gathering tempest—higher and higher it rises, onward, and onward it comes, the heavens are turned to blackness; the sleeping abyss awakes into rage and boils like a pot, and our noble ship; see, how she drives before the storm, pitching, tumbling, careering and righting, and again pitching, tumbling, careering and righting, and again, and again and again; and see that mighty wave, as it strikes her in her very forehead, and sends what seems a death-quiver thro' all her length, but lo, she holds on her course as tho' nothing was the matter, now lifting up her noble prow high above the raging waters, and now plunging it beneath the foaming abyss—now giving way, and accommodating herself to the resistless force of the waves, and now gallant-

ly meeting them, and plowing her resistless way thro' them, while they meet and dash around her, and sweep in avenging fury over her decks, burying her in a liquid grave—but see, she comes out like a duck, and again dances upon the raging waters.

Come with me now, and sit here upon this sofa, and holding fast, look up thro' the sky-light of the ship, and see that mountain wave hanging over her now, and threatening to swallow her up. But lo, as the mighty mass presses upon her, she careers upon her side; it passes underneath her, and lo, she is riding proudly upon its back.

But hold, what is the matter now? Why nothing, only our noble ship has been tripped up, and has fallen into "the troughs of the sea," and you would think the great globe itself were rocking upon its axis beneath you. And there she lies rolling like a log, at the mercy of the waves, having apparently given up the struggle, and resigned herself to her fate. But wait, she is only watching her opportunity, and, at the lucky moment, she darts out like an eel, and is again battling with the storm.

Night came on, and hung her gloomy curtains around us, and I confess, that a shadow passed over my soul, as the last rays of the cheerful light of day went out in the development of the storm, but rather the spirit of the tempest seemed to gather up his energies, and to come down upon us with accumulated power, as the darkness of night increased. The wind seemed to be let loose with increased fury, at every breath of the tempest, while our gallant ship staggered and reeled, as she worried her devious way amid the billows, which broke more and more fiercely upon her, as the darkness of night thickened around us. All was confusion, uproar and affright within—women shrieked, children screamed, and stout hearts quailed.

At this fearful crisis I looked out, and O, what a scene of terrible grandeur! The tempest howled from above, the deep hollowed from beneath, and our trusty ship, now riding upon a monster wave, in a moment, pitched from it, and went down, down, down—surely, thought I (at the instant,) as the dark waves lifted themselves up on high all around her—surely, she is going to the bottom now—but she rose like a cord, and not a wave was suffered to come near her decks. Nobly did she rise that time, and sublimely stride her way over the opposing billow. But this was only one of a constant succession of her triumphs. But how long will she be able to hold out? Will she never tire and give up the contest? These were questions which I was willing should be left to herself to answer, for I felt assured, that she would "outride the storm."

In the excitement of the occasion, I had forgotten that I was a sick man—I retired to my berth exhausted, but with difficulty kept myself in it. It verily seemed as tho' the elements had broken loose from all controlling power, and had rushed back into their original chaos, and, with-

out form and void, were warring against each other in their maddened fury, and were tossing the ship hither and thither in the wild uproar.—Nor scarcely less did chaos reign within.—Heavily and gloomily, (and O how parsimoniously,) were doled out to us the hours of that long-to-be-remembered night.

But they were measured out to us until midnight, when there were some indications that the fury of the storm was near being spent—and so it was verily—gradually the wind lulled away, the commotion without and within subsided by slow degrees, and the elements, as tho' tired and exhausted, settled down in calm repose. Morning broke, and O what a morning that was—and the sun, as he rose in placid beauty, and flung his mild beams athwart the glossy deep, as it rolled quietly and lazily in mighty swells around us—did ever so beauteous an orb rise upon the world before? And the faces all lighted up, and the voices too, so sweetly mingling their mutual congratulations, O how delightfully did they contrast with the look and the howl of despair of the previous night. From many a lip fell, that morning, audible expressions of gratitude to that great and good Being who had kept us as in the hollow of his hand, while we were permitted to look out upon such a wonderful exhibition of his power.

"His way is in the whirlwind and in the storm,
And the clouds are the dust of his feet."

And yet, I must say, that, terrific as was the scene, and reluctant as I should be to pass thro' another such, I nevertheless enjoyed it not a little. Having the fullest confidence in our captain, (noble fellow) and in the strength of his magnificent ship, and having all the sea-room that heart could wish, I felt almost as safe as tho' I had been in Noah's ark, especially when I reflected that the great Jehovah was himself riding upon the storm, with his hand resting calmly upon the helm.

Yours truly,
WARREN ISHAM.

NUMBER III.

ONE DAY IN ENGLAND.

BRISTOL, England, May 29th, '51.

Well, I have spent a day in England, and have set myself down to write about it. I thought over with me all those republican antipathies with which I was born, and which have "grown with my growth, and strengthened with my strength," altho' I had endeavored so far to put them to sleep that I might be prepared to appreciate what was good and valuable under the monarchical governments of the old world. Judging, however, from one day's experience, I greatly fear, that I shall not be able to keep them a sleep long. Within the first half hour after my arrival, I was directed, in reply to inquiries, to pass

up Prince street, cross King street, go down Duke street, up Charlotte street, cross the Queen's place, &c., &c., which certainly would have been an overdose for my American stomach, but for the civilities which I have received, and which operated as a cordial, to some extent.

This is a land of law and order, and yet within two hours after my arrival, I witnessed a case of Lynch law, executed in fine style. Passing along the street which lies upon the river, I noticed a well dressed and rather fine looking man, with a rope in his hand, and a knot at the end of it, which he commenced applying without mercy to a young man in his shirt sleeves, a lad about sixteen, while there were two or three others backing him up, all in the street. The boy showed what fight he could, but was being most unmercifully beaten. Suspecting how the matter stood, and taking pity on the poor boy, I stepped up and told the man to desist, or I would have him before the police in less than ten minutes. In an instant he ceased applying the rope, and turning around apologised, by saying, that the boy had been very troublesome about his premises, and there seemed to be no other way to manage him. I told him that was a very poor way, and at the same time I told the boy to go home, and he bounded off in quick time.

I mention this circumstance, not to show, that the spirit of insubordination to law prevails here, but the reverse. The man showed great trepidation at the idea of being brought before the police. No country in the world has so well organized a civil police, as England. Of this I was aware, or I should not have made so bold. It is very rare, that a rogue escapes detection. I am told, that so perfect is the organization of the police in the city of London, that if any thing is stolen, within fifteen minutes from the time it is known to the police, it is communicated to every pawn-broker, and every dealer to whom the article would be at all likely to be offered, throughout the whole of that vast metropolis, and that it is seldom that it is not recovered.

A few years ago, a man by the name of Tazwill, returned from the East Indies, where he had resided, with a large fortune, and settled about a hundred and fifty miles from London, having brought with him a female, who occupied a small house alone upon a retired part of his estate. This female was found dead in the house one morning, while a bottle of porter and a couple of tumblers stood upon the table, the bottle being partly emptied. Examination was made, and it was discovered that she had been poisoned with arsenic. Tazwill had not been seen to go near the house, but he was suspected, taken up and examined, but nothing found against him. Months passed away, and at length it was discovered by the police, (who had been at work the whole time) that just before the death of the female, Tazwill purchased arsenic at one of the smallest drug stores, in one of the most obscure streets in the out-of-the-way parts of London, a

hundred and fifty miles from his residence. He was identified by the druggist, tried, condemned, and executed. This is but an instance showing the perfection of their police system, not only in large cities, but all over the country.

Bristol is a very ancient city; the people here say, that its history can be traced to the reign of Brennus, a king of Brittain who flourished 330 years before the christian era, which was 2200 years ago, and it bears visible marks of very great antiquity. It has a population of about 170,000, spread over an area of three fourth miles by two and a half, divided into acclivities, inclined plains, &c., and is located upon the river Avon, which is navigable only at tide water, the tide rising here 23 feet. The buildings are of stone and very substantial. It does not make as fine an appearance as our cities of the same size, but there are many buildings about it, of more costly architecture, and more imposing in appearance, than are to be found among us. The Bristolians claim for it the rank of the second city in England, but it is far from deserving that distinction. Clifton, spoken of in my last, is properly a part of Bristol.

Bristol has the distinction of being the birth place of Hannah More, Admiral Penn, and Sebastian Cabot, the great Navigator, whose expedition, which resulted in the discovery of Newfoundland, was fitted out by the citizens of the place. At this point, the Danes, found entrance into England in the time of the first Edward, but were finally driven back with terrible slaughter by that monarch. Here Queen Eleanor was imprisoned in a castle forty years by the monster king John, and the Jew Abraham was here confined in the same castle by the same monster, and had one tooth a day knocked out till he submitted to pay the enormous sum demanded of him—which castle was razed to the ground by Cromwell.

There is no daily paper in this city, nor in any other city in England, except London. There are only five weeklies here, high duties preventing the multiplication of papers in England.

After dinner, I went in company with my German friend and his cousin, (spoken of in my last,) to ramble an hour or two in the Bristol Zoological garden, located upon the heights of Clifton. Entering the cab, we ascended Park street which rises at nearly an elevation of forty five degrees, walled up on either side with massive stone buildings. Upon the eminence stands the asylum for the blind, an immense gothic structure, of surpassing architectural beauty, and onward as we drove, appeared a great number of magnificent private residences up on the receding high-lands adjoining the city. Passing Clifton, and having taken a look from its awful heights, we entered the garden, where we found all sorts of wild beasts, "fowls and creeping things," together with most beautiful shrubbery among which run the winding gravel walks, and in the middle of which is a beautiful little lake,

studded with green Islets, and occupied by water fowl of every description, and in the middle of that a fountain in full play—a lovely and romantic scene truly. Why have we no such thing attached to our American cities? Even New York, with its six or seven hundred thousand inhabitants, has no Zoological garden. Returning, we passed a steamboat in the process of building, which is considerably longer than was the Great Britain, which was lost on the coast of Ireland, and which was also built here, and cost over half a million of dollars.

Nothing can exceed the vigilance of the custom house officers. They board a vessel, as soon as she enters the mouths of the rivers, and never leave her till everything has been examined. Our trunks were taken to the custom house to be searched. My trunk, however, seemed to engage the attention of the custom house officers more than its contents; they expressed their admiration of it, both for its strength and beauty, and yet it was nothing more than a common, brass knobbed, twelve dollar, American trunk.

But I must close, without having half finished my first day's impressions of England.

Respectfully yours,

WARREN ISHAM.

NEW PUBLICATIONS.

Western Horticultural Review, Dr. John A. Warder, Editor; published monthly at Cincinnati. \$3 per Year. No. 7.

It is with much satisfaction that we present this new periodical to the notice of our readers. Fruit growing in the West is yearly becoming of greater pecuniary importance. The vineyards of Ohio already begin to rival those of the Rhine; and none but persons engaged in the business have any idea of the large trade carried on in dried apples and peaches. The export of fresh fruit to Europe and to the West Indies is no small item; and the greater part of the South-West, Texas and Mexico, must depend upon the North for their apples, as we depend upon them for oranges, lemons and bananas. From the table given the last Congressional "Report on the Finances" we learn, that during the year 1849, 4,085,938 gallons of wine, valued at \$1,233,895 at the place of importation, were received from abroad into the United States, costing the actual consumers probably *four millions* of dollars; and the prime cost of which had to be sent out of the country, probably in silver, to pay for it. A writer in the "Patent Office Report" for 1850, just published, thus speaks of the value of fruit: "It is my belief that one of the true sources of agricultural wealth at the North, is to be found in the

cultivation of apple orchards. It has already become a prominent object of attention in some parts of New England, and requires only to be appreciated to become vastly more interesting as well as profitable. But facts are more valuable than theories. * * *

The orchard of Mr. J. Robinson, Chester, N. H., covers about 2 acres of land. The trees are only from 20 to 25 feet apart, and the fruit is principally Baldwin and Russet. The product in 1849 was 260 barrels of marketable apples, that were sold at home for \$2.62 per barrel, giving more than \$680. In the year 1847, Mr. R. refused the offer of \$600 for his apples *upon the trees*. I have charge of a small orchard in the same town, covering about half an acre. In 1847 I selected 5 bbls. of the fruit of it, and sold the rest for \$100 on the tree. In 1849, I gathered 55 bbls. for which I realized \$125 beyond all expenses. In 1848, 1,747 bbls. of dried apples and 459 bbls. dried peaches, were imported into N. Orleans, down the river; and in 1847, "three millions, five hundred and fifty-eight thousand bushels of dried fruit, reached the Hudson River by Canals, valued at \$320,364; and in 1838, 12,628 bbls. of green apples were imported into the city of St. Louis alone.

These few facts are sufficient to awaken greater attention, and to show that fruit growing is not a mere fancy pursuit, suited for wealthy amateurs, but that when properly managed, it is perhaps the most lucrative branch of agriculture known, requiring the least outlay and trouble.—But this properly managing, is the difficulty.—Every one thinks that he knows how to grow a tree, and what kind to grow; whereas, in truth, —and we say it with some rather bitter experience,—horticulture is a distinct pursuit by itself, requiring study, experience and thought, to be successful in it. This very apparent facility is and has long been the greatest bane to the farmer; and if he could but be persuaded that his orchard has its own difficulties and demands, its own peculiar knowledge, he would pay a deeper attention to it, and succeed better, as his yearly profits would show him. Now the best has its own peculiarities in fruit as well as in other things; and it often happens that an apple, which is excellent on the sea shore, is utterly worthless on the Lakes, or the Ohio; or a kind of management suited for Rhode Island would be certain death in Illinois. It is for this reason that we are pleased to have a *Western Horticultural Journal*. Eastern farming papers are not adapted to us. They are written for a different latitude, and for different habits. They have to make a soil rich. We labor to make it poor. Our Eastern friends grow what suits an Atlantic or European market. We grow what suits our own or a Southern one. For this reason we have always considered that he who followed Mr. Downing's writings, in Michigan, would find him-

self swamped—however excellent they are for his own region. This Review is as well printed and illustrated as his. It has as able contributors—indeed in Ohio we expect abler. It is suited for us. It is western and gives western experience, with western sympathies; and we sincerely hope that it will have universal western support. It enters into all topics connected with the orchard, vineyard and garden, and culls from other periodicals, American and Foreign whatever may be of service. The price, too, is really low. It forms a handsome monthly pamphlet, on fine paper, of 46 large octavo pages, with engravings; and an illustrated cover; and presents a novelty in adding besides 16 pages of advertisements connected with farming and gardening in various parts of the country; and all this for only \$3 a year.

The Farmer's Guide to Scientific and Practical Agriculture &c., by H. Stephens F. R. S. E. Author of the Book of the Farm, &c., assisted by John P. Norton, M. A. of New Haven, No 15, L. Scott & Co., New York, 1851.

A more valuable work on agriculture, than this, was never written. Mr. Stephens, a thoroughly educated Scotch Farmer—and in Scotland farmers are educated for their profession as carefully as physicians for theirs—has devoted a considerable portion of his life to the elucidation of agricultural principles, and the simplifying and improving the practical operation connected with them. A man of plain, clear, and earnest mind; free from affectation; accustomed to teaching young men placed upon his farm for the purpose; he expresses himself in the simplest manner, and arranges his materials so as to prevent all confusion. He appears to have accumulated his information with the greatest industry; much is original, the result of his own or his friends' experiments; and we doubt whether there is anything whatever connected with farming, worth knowing, which Mr. Stephens has not presented to his readers. It is an encyclopedia of the subject; and, so far as we can judge, of the most reliable character. Mr. Norton is already well known to American Farmers. A native of New Haven, Conn.; a pupil of Professor Silliman; an enthusiast in chemistry; he spent some three years in Scotland, under the instruction of the celebrated Professor Johnston; and we personally know the high opinion which the latter gentleman entertained of his abilities, and character. His part in the work is confined to appendices, adapting the book to American readers. It is published by L. Scott & Co., of New York at \$5, for the whole; and is afforded thus cheap by the importations of the original stereotype plates, and steel engravings; the latter of which are by the most eminent English artists, and of the very highest merit.

C. F.

Since the above was written we have received Nos. 16, 17 and 18 of the above named

work. The publishers have increased the size of the last six numbers from 64 pages to 96, without increasing the price. This is indeed meritorious, and a thing that publishers seldom do. The public are indebted to Leonard Scott & Co. for their generosity.

The *Miscellany* for June is replete with interest. It deserves an extensive patronage.

From the Publisher, C. M. Saxton, N. Y. City, "The Complete Farmer" and "Youatt and Martin on Cattle." The former is by Mr. Thos. G. Fessenden, former Editor of the N. E. Farmer, and is peculiarly American, and its teachings eminently practical, and easy.

The latter is a finished work and should be in the hands of every farmer. They are to be had in this city.

DANGER OF THE MILLING INTEREST.

The wide margin which has for two years past existed between the price of wheat in this State, and that of flour, and which experience shows to be constantly increasing, is attracting the general attention of business men, and the press, as the obvious effect of this state of things, if continued, will be ruin upon the milling interest of Michigan; and as those having that interest in charge, have long been painfully aware of the fact, we have been surprised that no concerted step has been taken by those whose interests are affected, looking to a remedy. The causes which operate to produce this state of things are obvious, around which no mystery is thrown, and are threefold; two of which are within the reach of remedy, if promptly taken hold of.

It is the object of the miller, of course, not to attempt to equalize the relative prices of wheat and flour, by the depression of wheat, but by the elevation of flour to the standard of wheat: more he cannot ask, less he cannot live under.

First, then, the millers should address themselves to the work of improving in the manufacture of flour, until this article will compare favorably with the best "fancy" brands of New York flour, and next, not less important, he should take measures, through active and responsible houses in New York and Boston, to make his article known in the market. The following fact, for which we can vouch, upon the word of one of the most experienced produce dealers in Michigan, will convince at a glance, that Michigan flour is not always kept down by its inferiority to favorite grades of Genesee and other Eastern brands.

A gentleman who is largely engaged in manufacturing flour in the interior of New York, and who has been so fortunate as to establish for his mill a high reputation among favorite brands, unable to make as much of the article as he can sell, has been engaged for some months past, and is now engaged in this State in buying up certain brands of Michigan flour, for the purpose of

taking it to New York, and there re-packing it into new barrels, upon which he places his own well known brand, for which flour, when so put up, he realizes from four to six shillings more per barrel than the very choicest kinds of Michigan flour, in the best order, will command under the most favorable circumstances.

It is apparent, then, that Michigan millers are now suffering, not in reality from the inferiority of the article, but from want of a *name*, and a favorable introduction to the market. An active and intelligent class of business men, such as compose the milling interest of Michigan, ought to be shrewd enough, if acting in concert, for a common purpose, to remedy this state of things. As flour increases in price, the shade of difference in favor of the choice brands becomes more and more defined, and the higher the article goes in market, the better the "fancy" article sells, and the higher the price.

The second important cause to which the discrepancy between wheat and flour is owing, is to the discrimination made by the transportation interest of wheat.

A boat, propellor or vessel, boarding at the docks in Detroit, while it will charge fifteen cents to carry a barrel of flour to Buffalo, or thirty-five cents to carry on to Oswego or Ogdensburgh, will take the four bushels and a half of wheat which it takes to make that barrel of flour for nine cents to Buffalo, and for twenty-six cents to Ogdensburgh.

It is the same thing with Railroad companies, only that the discrimination between the raw material and the manufactured article, is if possible, still more marked with them.

This source of inequality, bearing against the miller, can and ought to be remedied, by an exact equalization of the respective freights of wheat and flour, which can operate unjustly upon none—which result, a common and general effort upon behalf of the milling interest can accomplish.

The last and least important reason for the discrepancy arises out of the greater demand, higher price, and readier sale for the offal remaining from the manufacture of wheat into flour, at the seaboard than at home, the result of which is to invite the shipment of wheat in the berry for the purpose of manufacture there. This cause is beyond reach and without remedy, but is hardly important enough to be formidable, the others being removed.

When it is considered that there are 3000 men looking to mills for their subsistence, in this State, in the various capacities of millers, stave-makers, coopers and mill-wrights, besides many more remotely and contingently connected with that interest, and that not less than \$3,000,000 is invested in mills in this State, it will become obvious to all that the exigency which calls upon millers to protect themselves is urgent and imperative.—*Advertiser of June 5th.*

For the Michigan Farmer.

AN INQUIRY—THE NEW SYSTEM.

Mr. Editor: I perceive you have published some fragments of a former communication of mine in the May number of the "Farmer," and should there be no objections, I should like to trouble you a little more.

There are a few things in the Prize Essay of Mr. Isham, that I do not exactly understand, and as it is nearly time to commence plowing fallow, under the old system, I would be very much gratified if you, in the absence of Mr. Isham, or the farmers referred to, would give us a little more light, so as to enable us to adopt the new system.

The Essay says, according to the farm-books of one of the farmers spoken of, the entire expense of putting in a crop including the seed did not exceed two dollars the acre. This is so much less than it has generally cost me to get in a crop of wheat, I am anxious to know how its done; to plow my land the depth required by the new system, 10 or 12 inches, takes two heavy teams, and two hands; and in plowing 50 acres will average about an acre a day. The expense of two men, two teams, and use of plow is at least, a \$1.50 a day, and when I come to add two cultivations, two harrowings, sowing and two bushels seed wheat, it amounts to so much more than the two dollars, that I begin to conclude I know but little about wheat cultivation as yet. Before reading the supplement, I had concluded that the difference must be in the time the plowing was done, as the Essay says: "It is amazing to see to what extent the great mass of our farmers are wedded to a system so enslaving and so ruinous, which wears out the energies of both man and beast under the scorching heat of a summer sun, and all for nothing, and less than nothing." In another place, the Essay informs us, that, "Seldom have we known a season in which there did not come on a drouth just about the time the great summer-fallowing operation was going on, which packed the ground so hard as to make it almost impossible to plow at all." But the supplement tells us that the proper time to plow is in the months of July or August.

I am curious to know what guarantee we have that the sun is not as scorching, and the ground as likely to be dry and hard in July and August, as in May and June, the usual time for plowing fallow in this section! Is it not just as well under the new system, to plow in June as in August—if not why?

I very much regret that, after the many good things that has been said in the Essay, to find the following paragraph in the supplement—more particularly, as it is to form a part of the transactions of the Michigan State Agricultural Society:

"We have been waiting to see if some snarling invidious creature would not growl out something!"

This would seem intended to frighten us from

investigating the merits of the Essay, or asking any questions, for fear of being considered 'snarling and invidious.' There is little danger of too much light, and it can do no hurt to point out what any one may consider imperfections in a wheat Essay, or any other essay, written by the editor or any body else, as our way to arrive at correct principles, is investigation, and error may be tolerated when reason is left free to combat it; at least, so thinks

Your humble correspondent, D.
Galesburgh, May 5th, 1851.

Horticultural.

REPORT OF LENAWEE COUNTY, MICHIGAN,

To the Pomological Congress, Cincinnati, 1850.

—
BY W. H. SCOTT.
—

Chairman of the General Fruit Committee:

The Fruit Committee of the Lenawee County Society have but a meager report to make. Until recently there has not been such an organization as the most effectually to exhibit the character of the fruit cultivation of this part of the State. Those who have been the most devoted to the improvement of fruits have generally found the result of their labors quite satisfactory, and have met with but few obstacles in the perfect maturing of most varieties.

The grape is, perhaps, the only fruit that has not abundant time to come to full maturity. The Isabella and most of the more hardy varieties ripen before the severe frosts; but the Catawba often does not have sufficient time.

The Variety of soils in southern Michigan is such that there is abundant opportunity to test the comparative advantages of each for orchards. So far as I have observed, no trees present a more thrifty appearance, and yield better, than those on soils rather inclining to clay with a mixture of gravel. Insects are much less troublesome than on the sand; and young trees, and especially the cherry, do not make a growth so disproportionately rank as on light soil.

Taking all the fruits into consideration, the season has been full an average one in southern Michigan. The autumnal frosts came on so gradually last fall, that fruit buds were well matured. In December the thermometer fell once to 3° below zero; in February, once to zero.—This was the coldest of the winter here. The uniformity of the cold through the winter was most favorable for fruit buds. But March, April, and May, were noted for severe frosts. There were eleven in May. Fortunately it was very dry, and the same injury was not done to the blossoms as if the month had been ordinarily wet. The peach orchards on rather low ground were seriously

affected by these late spring frosts, and apples also in many instances. The apple crop will not be more than an average one.

APPLES.—Good progress has been made. I have not learned that any of the leading varieties, either in fruit or tree, have failed to do well where proper attention has been bestowed by the cultivator. The Quakers, who are among the oldest residents of Lenawee county, and constitute quite a large proportion of the thorough fruit growers in this region, have some of the finest apple orchards. These orchards have been planted on almost every variety of soil and locality capable of producing farm crops. I have seen none looking and producing better than those planted on clay, where the soil contained a mixture of gravel, and were sufficiently rolling to carry off quickly all surface water. The best mode of cultivation seems to be thorough plowing and no under crops. Insects have been unusually troublesome the past year.

The summer apples most cultivated are the Yellow Harvest, Sweet Bough, Summer Queen and Spice Sweeting. Good specimens of the Early Strawberry, and Summer Rose, have been exhibited at the meetings of the society, but are not yet very generally cultivated. Among these none are gaining in popularity more rapidly or more deservedly than the Sweet Bough. Here the tree is always healthy, and bears generally a moderate crop of large and fair fruit.

Among fall apples, the Fall Pippin, Autumn Pearmain, Rambo, Holland Pippins, and autumn Swaar, do well. Among the common winter apples, so far as I have learned, none fail. The Newtown Pippin on clay soil does well. I have been told that there are trees on sandy land doing equally well, but have not seen them. Rhode Island Greenings invariably fine on either sand or clay. The Roxbury Russet, Tallman's sweeting, Yellow, Bellefleur, Spitzenburgh, English Russet, Swaar, Herefordshire Pearmain, Wine, Jonathan, Red and Black Gilliflower, are in most common cultivation. A choice of five of these would probably embrace the Rhode Island Greening, Spitzenburgh, Bellefleur, Roxbury Russet, and Swaar.

Less commonly cultivated, but excellent, are the Westfield Seek-no-further and Belmont. I have not met with a cultivator of the Belmont who does not consider it either the best or among the best in a small list of winter apples. Next to this, all considered, place the Yellow Bellefleur. The Northern Spy has not been sufficiently tested to speak of its merits.

PEARS.—The finer varieties have been so rarely cultivated until recently, that little can be said. Young trees of the better sort are fast coming on, and in three or four years nearly all now noted in other places may be tested here.—So far, the pear has been very healthy, and I have scarcely met with a case of blight.

PEACHES.—More attention has been paid to

this fruit. Nearly all of the best varieties have been tested, and succeed admirably, both as to size and flavor, but good crops can not be depended on as often as in many other parts of the country. Quite a number of seedlings have been exhibited. As more reliance can be placed on these, for regular bearers, and for hardiness, than on the budded sorts, there is a very general disposition to encourage their cultivation. Orchards on high grounds have been quite overloaded. In some of the more elevated positions the crop has not failed since the trees commenced bearing; while in neighboring orchards on grounds 20, 30, or 40 feet lower, the trees have not borne oftener than one year in three. I have seen an excellent example the past season of the relative advantages of slight elevation and a proximity to water. From the river Raisin, a small stream, there is a gradual ascent on one side of 25 or 30 feet in three quarters of a mile. At that distance the ascent is more abrupt to an elevation fifteen or twenty feet higher. On this highest ground the peach trees were loaded with fruit; just at its foot the trees have not borne; but as the river is approached the trees were more and more full, until quite near it they bore abundantly. I have heard of no cases of the Yellows.—No worse enemy has appeared than the Peach worm.

CHERRIES.—Considerable attention has been paid to this fruit. Among the leading varieties the Black Tartarian has been as popular as any; though our fruit committee have thus far given the preference to the Black Eagle for flavor.—Fine specimens of the Napoleon Bigarreau, Elton, Mayduke, American Amber, Manning's Late Black Heart, Madison Bigarreau, Black Heart, Yellow Spanish, and White Bigarreau, have been exhibited; and several seedlings that may prove worthy of cultivation. Trees are sometimes attacked by sap blight, but not so frequently as in many portions of the country. This disease has been most troublesome to trees having a very rapid growth when young, and on sandy land.

PLUMS.—Many of our leading fruit cultivators have exhibited a commendable perseverance in their efforts to grow plums. They have cultivated a large variety of the best; still, very few growers could spare the time to keep off the curculio, and as a consequence comparatively few have succeeded in saving their plums. On the whole, the attention devoted to plum culture here, except by amateurs, is rather time wasted; and must be so until some more effectual remedy shall be found against the curculio.

GRAPES.—The season at the time of making this report, has not arrived for the proper test.—The Isabella is the only one of the good varieties very commonly cultivated. It generally has time to ripen well. A later grape is often touched by severe frosts before full sweetness is attained. The Catawba is subject to this draw-

back, and the south side of white-washed walls will be a necessary position for it. Fine clusters of the White Sweetwater have been exhibited. It requires protection through the winter.—The taste for grapes has not become sufficiently refined to prevent the very general cultivation of the showy, but coarse and acid Fox grapes.—*Western Hort. Review.*

For the Michigan Farmer.

HORTICULTURAL INQUIRIES.

Mr. Editor:

Can you, or any of your readers give me a preventative against the *meadow mole*, which destroys trees? I have been, this winter and spring, a severe sufferer from them. I have two orchards, at about an eighth of a mile apart. The largest measures 10 acres; the other three acres. The first contains trees of from 15 to 20 years planting; and has been in meadow during the eight years I have owned the farm. The other has trees of about 12 to 1 years planting; and has generally been ploughed; last season I raised a crop of oats on it. With the largest I have taken great pains for some years; manuring constantly with ashes, lime, and dung. The latter, which I lately purchased, has been much neglected. In both the grass that grows round the roots is occasionally dug away. Early last fall I dug round some of the trees in the largest, the others were left in the sod. In January, I found two or three small trees killed by the mole; but no more: and from that time I carefully watched them, till warm weather set in, in February. I was not in the orchard for three weeks; when, to my dismay, I found twenty-five grafted apple trees entirely barked and destroyed in one orchard, and ten in the other. Many were so, six inches below the ground; and the majority were the oldest trees, 8 or 10 inches in diameter. A few were only partially injured and will recover. But the most singular circumstance is, that the injury is, without exception, on the trees that were dug round and clear of grass, and in a few instances where one side was clear, and the other with a heavy sod against it, the last side was not touched. There is not a tree gnawed where the grass was rank at the root. This upsets all usual experience. I ought to say that I always pastured the first till two years ago, after the hay was cut; and never saw a tree hurt on my farm by the mole, in any situation, but the oat stubble field being comparatively more injured than the other, this does not appear to be the reason. Not a peach, out of some dozens is touched. They have now stopped their ravages; but what am I to do another year? I trust some of your readers have had experience, and can inform me. The chief mischief is under ground; and there the mole had his nest.*

QUERY.

* Will those who have had experience answer.

C. B.

WAYLAND, Allegan Co., Mich., }
May 6, 1851. }

Mr. Isham—Sir: I have had the pleasure of reading your valuable paper for the last year, and find it treats upon many subjects particularly pleasing and instructive to your lady readers, and therefore I have taken the liberty to ask for a little information with regard to the best method of cultivating the "Pie plant" or "Rhubarb." I have tried for three or four years in succession to raise healthy thriving plants, but as fast as the young leaves unfold they are eaten by a bug or worm, so that they are of but little value. Can some one who has been successful in their cultivation, tell how they plant them, in what kind of soil, in what situation as regards sun and shade, what compost they require, and if they have been troubled with worms or bugs, how prevent their ravages.

I should also like to find something in your instructive paper upon the cultivation of "Asparagus."

I am much pleased with the ladies' department in your instructive periodical, and think it would make a valuable addition to the reading matter of any farmer's lady who is interested in the farming operations of her husband, and therefore wishing it a wide circulation through our land, I subscribe myself

Your well wisher, &c.,

SARAH E. W.

REPLY.—If only a few plants of the Rhubarb are wanted, the better way is to obtain the roots separating them and leaving an eye to each.—These should be planted 2 or 3 inches below the surface on a deep, rich, mellow bed. The location is a matter of not much moment, tho' a southern exposure gently sloping, is preferred.—A moist sandy soil is best adapted to its growth, yet any soil worked deep and made rich will afford it in all its richness and luxuriance.

We have never known it to be destroyed by bugs or worms, and we have inquired of others, but none of them have ever been troubled with insects of any kind.

Will our correspondent give us a description.

We will give an article on the cultivation of Asparagus as soon as we can find room for it.—C. B.

For the Michigan Farmer.

LICE ON APPLE TREES.

Mr. Editor:

The condensed remarks in the May No. of the Farmer probably will answer the purpose, if strictly attended to; but if any of your readers are disposed to try the following they will perhaps find their object accomplished with less trouble, although the surface of the tree will not be injured by clearing it of all extraneous matter; but this is not telling the story. Take

a sharp knife when the bark peels freely, make a slit up and down the tree on the upper side, (if there is any inclination,) about three inches, something in the shape of the letter V, peel the bark from the point down, apply a small quantity of oil of Turpentine, and close the bark, tying it down, and the process is done. I have witnessed the beneficial effects of this operation on trees that were literally covered with lice, and in a few weeks they all left and the trees assumed as fresh and healthy an appearance as any in the Orchard.

Truly yours,

H. BETTS.

PRUNING THE PEACH AND CURRANT.

A correspondent finds fault with our manner of pruning the Peach and Currant. He says:—"Now to trim peach trees as 'C. B.' advises, is directly opposite to what I have found to be best from ten years' experience. It encourages too great an extension of the limbs from the centre. I see trees all over the country, laboring under this difficulty. It is not uncommon to see peach trees, (as well where they are trimmed up single stemmed, as when they are forked,) 10 to 15 feet long, about the size of a cane; the consequence is, that a dozen peaches and a little foliage at the extremity, acts as a powerful lever upon the main trunk, and if it does not split off or break down the tree, it cramps it, and it becomes unhealthy; besides it looks badly to see such naked bodies or limbs, reaching out from 1 to 2 yards, without fruit or foliage—it looks unsightly."

It does indeed; long, cane like branches, running up from the ground '10 to 15 feet,' covered with dead limbs, with a "little foliage at the extremities," are very unsightly."

We never saw branches covered with dead limbs where the trees were pruned as recommended. We were always in favor of the plan of heading in, and it is thought by all successful cultivators to be a judicious practice. We give our correspondent's own words. We like all except the low branching, which obstructs cultivation, and air and sunlight to the roots and fruit on lower branches.

"Now, the best plan I know of, is to head in the trees the very first growth; say cut off $\frac{1}{4}$ or $\frac{1}{2}$ of the length of all the limbs—let them start as low as may be—this should be done in March or April, but better still if done in the fall before they are growing, so that the wood and first blossoms can mature. In this way the tree is kept lower, narrower, more compact, and the fruit is much more thrifty and larger, and the tree is so constituted as to be able to bear up its fill of superior fruit without injury. Many more and much finer trees, and much more and finer fruit, may be thus cultivated upon an acre than in the usual way; and the trees last much longer. Again, I believe it a good plan, once in a while, (especially seasons that the fruit-buds get killed,

so that no fruit is destroyed,) to cut off most of the tops, and let it form a new head, which it will soon do, on which the fruit is always much larger and better.

Now, a word about Currants: Instead of pruning as 'C. B.' recommends, I prefer training low in stools. Set in rows, 6 or 8 feet apart, and 4 feet apart in the row. When trained in trees they soon become mossy, and stunted, and fail; * but train as bushes, and cut out the old wood as soon as its 3d crop is off, and also cut away of the young wood, all dwarfs and superabundant stalks, leaving a sufficient number of thrifty shoots for a proper stool. In this way, the fruit is much larger, and your currant yard never fails. Manure well in the fall when the fruit is off, and work it in with hoe and spade.

Yours for good Fruit,

Jackson, May, 1851.

J. T. W.

* Not if they are properly cared for.—C. B.

For the Michigan Farmer.

FRUIT-DRYING HOUSE.

Friend Isham:—As the season for fruit-drying is fast approaching, perhaps a description of a building adapted to that purpose, may be interesting to some of your readers.

Having a large orchard, consisting of 500 apple trees and 150 peach trees, which have just commenced bearing, I found it necessary to adopt some method to secure my fruit, and drying presented itself as the safest and most profitable way. Accordingly I set about building a house, and being in need of an ash safe, resolved to build them together. I built an upright of 9 by 11, 8 feet in height, on a good stone foundation, placing a common twelve light window in one end, and in the other, fronting the house, a door. In the end where the window is I have a chimney. The walls are 8 inches in thickness, arched and plastered inside. The inside work consists of screens, 25 in number, 2 feet 3 inches wide, 12 on each side and one overhead. These are supported by 2 inch square posts in each corner, in which mortices 3-4 x 1 1-4 inch are made to receive a railing to support the screens. The rails are received at the other end in a gane-mortice, and may be taken out at pleasure.

The screens are made of wood in the following manner: 3 strips of 3-4 x 1 1-4 to fit the inside, (the one in the middle rendering it stiff). Across these are nailed small slats, near enough together to retain fruit when dry, thus making a light, stout and durable screen. These are sufficiently large to hold from 1 to 1 1-2 bushels each, which enables me to put up 30 or 35 bushels at a filling. By means of a large box stove these may be thoroughly dried in 36 hours, and then refilled. The fruit dried in this manner is of superior quality, being much better in flavor, and presenting a cleaner and neater appearance than when dried in the ordinary way.

This building, being near the house, when not in use for drying fruit, makes a convenient milk or store room, as the screens may all be placed overhead out of the way, and shelves put in their places. My ash safe is a wing, 6 x 7, 5 1-2 ft. in height, arched overhead. My bin is laid up of brick, sufficiently large for 40 or 50 bushels. It also serves as an excellent smoke house, hanging the meat round on hooks for that purpose, and building a smoke on the ashes, makes it neat, clean and safe. I have a small vent on the back side, 6-inches square, that damp arising from the smoke may pass off.

The cost of this building, including everything done in a neat, tasty style, was \$157.90. If you consider this worth a place in your columns, you are at liberty to publish.

N. J. BROWN.

Rawsonville, May 5, 1851.

NORTHERN SPY APPLE.

This beautiful and excellent fruit is in our market this spring, in moderate quantities, selling at high prices. It is fresh and juicy, and is in use in a good time, as it becomes ripe about the time the Baldwin is failing. The Spy apple is in use in spring and early summer. It is large, generally fair, and of the best quality. We have had this fruit every year for the last six or seven years, and have examined the subject well, comparing it with various other apples.

A few years ago, we found a stray barrel of the Spy in the market, without name, and we bought it at the usual price of apples. From exposure these ripened up in winter, when the Baldwin was in its prime, and we found the Spy finer in texture and much superior in quality to the Baldwin as a table fruit. As a winter apple the Baldwin stands unrivalled for its great growth and production, and it is a popular apple in the market; but in the spring it grows mealy at the core, and loses its quality, though still preserving a fair exterior. When one side of the Spy is decayed, the other side is fresh and juicy, so that in attempting to keep them long, they are not lost before exhibiting indications of decline.

In favorable locations, in Western New York, and with good culture, the Spy produces large crops of fine fruit, and as our climate is similar, we hope that it will succeed well here. Whether it will ripen up well much farther north, remains to be tested. One thing is certain, that it is very hardy against cold, more so than the Baldwin.

From the facts we already have on this subject we believe that we must have a good strong soil, and high culture, for the Spy apple, and as the shoots run up very thick, they will doubtless need thinning to let in the sun. We have observed that those specimens of this fruit that lack color, are wanting in quality also, showing that exposure to sun and air are requisite to bring them to perfection.

As a limestone soil is said to be best for the Spy apple, we advise those who cultivate it where

there is probably a deficiency of lime, to put a little old lime around their trees. Ashes, and a small quantity of bone manure and salt, are also very good for all kinds of fruit trees on old lands.

Some nurserymen who have not kept pace with the improvement of the times, have discouraged the cultivation of the Spy apple. We wish that such persons would compare it with the best fruits in the market, and then judge whether it is not better to cultivate some late fruits for spring and early summer, than for all to cultivate one kind extensively, which fails in the spring.—*New England Farmer*.

MICHIGAN STATE AGRICULTURAL SOCIETY.

The Executive Committee of the Mich. State Agricultural Society, acknowledge the receipt, from the State, of a bound Volume of each, the Journal of the Senate, and House of Representatives, Senate and House Documents, Joint Document, and the Session Laws for 1850; also, the Manual for 1851. From the Essex Institute, Massachusetts, Dr. H. Wheatland, Secretary, several valuable Agricultural, Horticultural, and School Reports.

From C. B. Holmes, Esq., Lynn, Mass., valuable Agricultural Reports.

From the American Institute, New York, H. Meigs, Esq., Secretary, Proceeding of the Farmer's Club.

The discussions of this club are very interesting and instructive, and are worthy of an attentive perusal.

J. C. HOLMES,

Sec'y M. S. Ag. Soc'y.

Detroit, 15th May, 1851.

For the Michigan Farmer.

LEO AND TIP.

Leo is a fine old Newfoundland dog, with his soft, shaggy, black and white coat. He is almost too good-natured, for he will let naughty people come into our orchard, and help themselves to our fine fruit; but then he is so affectionate, and looks up into our faces with such confiding tenderness, that we all love him, and if he is not a defence against fruit-robbers, he is against our neighbors' hogs, for woe to any of them, should they chance to find our garden gate unfastened, and be tempted in; but, poor things! it does not seem right that they should suffer for their owners' neglect. It would be more just to dog them a little, for allowing the poor hogs to run at large, and get a living wherever they can find it. Leo, however, has learned that he must not attack them without leave, although it is a sore temptation.—He will beg, whine, look wistfully, and his mouth will water to get hold of them. He is a very sensible fellow—wiser, I doubt not, than some of my

little readers, for he will obey those who know better than he what is right. He seems to understand all that is said to him. If you ask if he is hungry, he smacks his mouth, winks in a very expressive manner, walks around to the kitchen door, seats himself, and waits to be fed. If he has to wait too long, he opens the door, and walks in; but, should any one say, "Shame, Leo!" walks out again, seats himself, and waits patiently until he is served. He will shake hands, carry baskets, bundles, or sticks, that are not too heavy for him, and will bring any little boy or girl out of the water, should they chance to fall in. It is no uncommon thing, in a pleasant summer day, to see Leo stretched out in the warm sunshine, forming a pillow for our beautiful tortoise-shell cat, and her three kittens, as large as herself, while the chickens run around him, and pick the grass seed from his long, soft hair; and, if they do not mistake his eyes for something to eat, and try to peck them out, he seems to enjoy their society very much.

Tip is a small black terrier. He is a modest, reserved little fellow, never pushing himself forward, or trying to attract attention; but, when noticed, is highly gratified, and very friendly and pleasant. He is very useful in destroying rats and mice, and, from his modesty, is quite a favorite. When a month old, he was so small, that my son brought him home in a side pocket of his coat. While a pup, he used to vex Leo by pulling his tail, biting his ears and toes, and various pranks that puppies are given to. It was amusing to see with how much disdain he would look upon his Lilliputian tormentor; but he would never hurt him, and, if he became very troublesome, would get up, and march out of Tip's way. They soon came to be very good friends, and almost inseparable companions, and the only falling out they have had since Tip's puppyhood, has been when the boys threw him into the river, and Leo would plunge in, and bring him out. This offended Tip highly, he thinking he was fully capable of getting out himself.

Tip is not as obedient as his more sensible companion. It was against our rules to have the dogs go from the house, with the teams, unless to go into the fields, and Leo never attempted to follow at any other time. He always seemed to understand, if they were going away, and remained quietly at home. Tip, on the contrary, would frequently steal off, and come out ahead of the wagon, when half way to the village. I have been amused to see him try to coax Leo off. From my window, one day, I saw the two friends crossing the bridge, leading toward the village. I called them back; but, being doubtful of Tip's remaining, I thought I would watch his movements.—They had seated themselves on the green slope, in front of the house. After a little while, they evidently communicated together, for they both cast furtive glances at the house, and, seeing no one, began to walk slowly toward the gate, occasionally looking back, and were soon again on the

bridge. I called them back a second time. Leo returned home. Tip came until the fence concealed him, and, as soon as he thought himself unobserved, gave a bark to Leo, and scampered away as fast as his legs would carry him, and was soon lost to sight and hearing.

Poor old Leo, like Uncle Ned, "is growing old," and is stiff, and unable longer to keep up with Tip, in his madcap chase after rabbits. He follows more moderately, and comes "in at the death," Tip always being willing to divide "the spoils." Leo is also getting somewhat testy at times, at Tip's being able to pass him, and will tumble him heels over head in the snow. Tip takes it all good-naturedly, thus teaching a lesson of patience and forbearance to those whose infirmities render them objects of compassion.

Yours, &c.,

D. M. B.

SHORT-HORN AND DEVON BULL.

The farmers of Michigan are awaking to the importance of improving their breeds of cattle.

We are truly glad to learn that Rev. Charles Fox, of Gross Ile, has lately obtained from Lewis F. Allen, of Black Rock, near Buffalo, a very fine young Bull. Mr. Allen writes concerning him: "The animal is as perfect in shape and symmetry as any one I ever bred. His sire is a son of Mr. Vail's (of Troy, N. Y.) celebrated imported bull "Wellington," out of an imported cow. I exhibited and sold him at the Ohio State Fair at Cincinnati, last October, and he was adjudged the best foreign Bull on the ground, and a premium awarded me. His dam is a pure Devon cow from the stock of Mr. George Pattison, of Maryland. Her I now own, and she cannot be bought at any price. Mr. Pattison derived his stock from the late Earl of Leicester, of Hockham, (formerly Mr. Coke,) in Norfolkshire, England. Better Blood than the Bull you have, does not exist in any herd in America, and the blending of the Devon and Short-Horn races, I think, makes the *beau-ideal* for milk, beef or draught."

Farmers who are able to improve their stock ought to do it. They owe it to the country to do it. And those who have commenced will be successful, that is, they will reap a rich pecuniary reward. It may be slow, but it will be sure. Of this we have not a doubt. For it is not every farmer in Michigan that has yet to learn that Stock and Grass are more profitable than Wheat. We do sincerely hope that the individuals who have commenced this work will be prospered

C. B.

Cut wheat, and other grains, when the straw just below the head is so dry that no juice is expressed on twisting, for then there is no more circulation from the root to the ear. No gain after this.

For the Michigan Farmer.

Mr. Editor: I wish to say to "Many Subscribers," through the columns of your paper, that the Michigan "sod and subsoil plow" will clean itself, after the first rough coating is removed, (which may be done with a brick or stone,) in any soil; and will scour itself in any soil in which any other plow now in use in this section of country will do so.

The plow can be had at two or three furnaces in this county, for twelve or fourteen dollars.

We have another plow in general use here, which I can recommend to our Indiana friends, for their prairie lands. This plow can be made, by simply elevating the wheel, to cut any desirable depth; and from its cheapness and durability, is preferable to the sod-and-subsoil plow. This is the "Michigan plow," raised standard, No. 3, with a "jointer," or small plow, fastened with an iron band on the left side of the beam, forward of the main plow. The "jointer" turns a furrow, about four inches in width, over on the remaining part of the sward on the right hand side of the beam; then follows the main plow still deeper, and rolls the whole into the furrow. It will readily be seen, even by the casual observer, that the upper edge of the furrow is entirely covered with the clean sub-soil. The "jointer" can be fastened to the beam on many other plows, like a coulter on a common breaking plow, and made to do a good business.

The "Michigan plow," full rigged, with the "jointer" and wheel, can be had for eight dollars; the "jointer" alone, two dollars.

Yours truly, CHA'S V. BARCOCK.
Southfield, Oakland Co., '51.

For the Michigan Farmer.

MONROE COUNTY.

Mr. Isham: Although I dissent from your proposition that wheat will become chess, I agree with your views on raising wheat, and think that though a wheat crop after a summer crop may not be so heavy, yet the summer crop is almost a clear gain; and if corn, pease, or other coarse feeding crops are raised, they consume that kind of nutriment in the soil, not particularly suited to the sustenance of a wheat crop.

The crop in Monroe county is very promising; our fruit is as yet un injured by frost, and the prospect fair for an abundance of every kind.

While my mind is called to the subject, I will say a few things about our county, which I think has been underrated as an agricultural district.—We have every variety of soil, from a light sand to a heavy clay, with frequent out-croppings of lime rock. For grazing purposes, it is not surpassed by any county in the State. Lying adjacent to lake Erie, the facilities of an eastern market are equal to any; the average product of the various grain and root crops, as good; no local causes of disease; with a healthy atmosphere; and yet good farms are selling here for

20 per cent less than in some of the interior counties. And why is it? The only satisfactory reason which I can adduce is, that every man, coming west to buy land for farming purposes, wishes to buy a wheat farm, and does so without reference to its value for other purposes.

Our agricultural community are turning their attention more to grazing than formerly, and I have no doubt to better profit. Corn growing is also becoming a profitable branch of husbandry, and when as preparatory to a wheat crop, quite so.

From my little experience, I think sheep are not so healthy in Monroe county as in the interior of the State; our climate is too variable, vegetation too rank, and grass lands generally too low and level for fine woolled sheep; yet there are several choice flocks in the county.

The stock of horses and cattle owned by the French population, and found here when the States-people began to emigrate, has doubtless been very much in the way of improving the breeds; consequently we are much behind many of our sister counties in choice herds of cattle and fine horses, though many are now awake to the subject, and are bringing in and raising some fine animals. We flatter ourselves that we shall see some splendid horses and cattle at our county fair next fall. At our last meeting, some of us farmers agreed to visit not only the State Fair, but the fairs held in counties adjacent, and endeavor to effect an interchange of products, and open an acquaintance, and induce a laudable rivalry in agricultural and horticultural advancement.†

Not being accustomed to writing for publication, I have used a great many words to convey a few ideas. If you can cull the useful or interesting, well; if not, your own time in perusing this, will be enough to lose.‡

Respectfully yours, W.H.M.

* We presume that our correspondent does not consider chill fevers and ague diseases.

† This would be a most excellent plan.

‡ We do hate to pay for printing apologies.—C.B.

PIERSON'S PATENT SEED DRILL,

Manufactured by Allen Vane, & Co., Chicago.

WE call the attention of the Michigan Farmers to this valuable implement, which has been manufactured and sold in the West, for near two years—fully meeting the wants of the Farmers. This Drill is so constructed that all kinds of grain and seeds, can be planted or sown to advantage with it. This Machine is simple in construction; easy to operate, finished very neatly, not liable to get out of order, and very durable.

With one man and team, 10 to 15 acres per day can be seeded, in the most perfect manner. As the advantages of drilling are so well understood, we deem it unnecessary to speak of that.

We are manufacturing a large number for fall sales. Any Farmer wishing one, will send his order immediately. They are, in all cases, guaranteed to work well; if not, may be returned.

One of them can be seen at Niles, by calling on W. E. Moore; also a field of wheat seeded last fall.

We also manufacture and deal in all kinds of Farming Tools of most approved kinds.

All kinds of Field and Garden seeds bought and sold. 157-58 South Wacker street, Chicago.

172m

ALLEN VANE & CO.

RECEIPTS for the Michigan Farmer, from May 12, to June 23, 1851:

O H Lee 3; L Keeler 1; J B Simmons 1; C Richards 2; S R Doty 2; W B Delano 75c; W H Montgomery 2; N Mosher 1; J S Castle 2; E Barrows 1; N Harding 1; A S Cook 1; R Winslow 1; E P Benham agent 10; J V Canner 1; H Taylor 2; R Garner 1; J H Appleman 1; A Beach 1; Wm Rudiman 1; N Hart 1; A Munger 1; C Peck 6; T H Fitch 1; M W Alvord 1; Wm Delano 1; R Beker 1; M Whitson 75c; N L Whitmore 1; G G Perry 1; T Stears 1; J C Murray 1; J Fuller 1; W Ten Eyck 1; J Placeway 1 50; Wm Heboor 1; N Cone 1; S Stanley 1; A H Hart 50c; G Kellogg 50c; S Moore 1; Rev S Harris 1; H Hunter 9; H Pennoyer 1; M Gaffary 1; H Howell 4; M Baldwin 3; M W Tanner 1; J H S Look 1; A Smith 3; S Johnson 860; L Walker 50c; T Dayton 1; J Strong 1; W C Smith 1; E P Benham agent 7; C Wheelock 1; D C Scranner 1; R Goodrich 1; J Skidmore 30c; B F Curtiss 1; O H Lee 1; A Henry 2; E Thornton 2; F Livingston 2; L Chapin 1; S Abell 2; H Woodburn 2; G E Wales 1; J E Kelsey 1; W H Faxon 1; D A Watt 1; I Gale 1; N Gray Jr 1; M H Hammond 2; J Holmes 1; J P Rigg 2; J S Ketchum 75c; L Sears 1; G Heydon 2; W Vanghan 1; E P Garlow 2; J O Cole 1; R McKean 1; M Swift 1; J Lamb 1; J Dewey 1; D Kellogg 2; Bennet & Mosher 2; N A Phelps 1; C Bolt 1; A Brown 1; D Hatch 1; A Sheldon 4; S C Coffinbury 3; B E Holmes 2; M A Dougherty 2.

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Detroit Prices Current:

Herd's Grass... \$ bu. \$2.00	Salt..... bbl \$ 1.25
Flax..... " " 1.00	Butter..... lb 10
Lime..... " bbl 75	Eggs..... doz 7
Flour..... " 3.35	Hides..... lb 8½
Corn..... " bu 44	Wheat..... bu 75
Oats..... " 30	Hams..... lb 8
Rye..... " 40	Onions..... bu 70
Barley..... " 93	Cranberries... 2 10
Hogs..... " 100 lb —	Buckwheat... \$ 100 lb 1.25
Apples..... " bu 1.00	Indian Meal... " 1.25
Potatoes..... 31	Beef..... " 4.50 to 5.00
Hay..... ton 6.00	Lard..... " lb (retail) 9
Wool..... lb 18@40	Honey..... 10
Peas..... bu 1.00	Apples, dried... bu 1.00
Beans..... 1.00	Peaches..... " 2.50
Beef..... bbl 7@8.00	Clover seed.... 5.50
Pork..... 12@14.00	Pine lumber, clear, 20 00 \$ M ft
White Fish.... 7.50	" " 2d " 15.00 "
Trout..... 6.50	Bill lumber.... 11.00 "
Codfish..... lb 4	Flooring..... 12.00
Cheese..... " 8½	Common..... 10.00
Wood..... cord 1.75@2.25	Lath..... 2.00

To Charcoal Burners.

WANTED, by the subscriber, one or two men to burn about sixty cords of wood into charcoal, by the job. They must be well and practically acquainted with the business. The wood is chiefly bass; is cut 4 feet long, and well dried, and lies in a good clear opening. Apply to
Jylt CHARLES FOX,
Grosse Ile, Wayne Co., 15 miles below Detroit, on the River.

DETROIT SEED STORE And Agricultural Warehouse!

GARDEN, FIELD, AND FLOWER SEEDS,

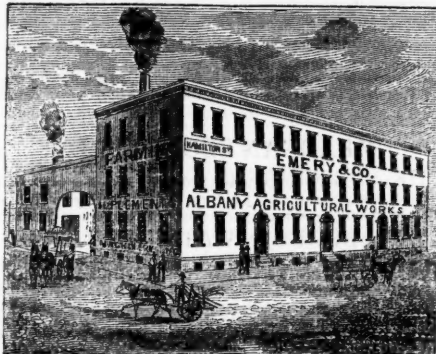
IMPORTED Flower Roots, Agricultural Implements and Machines, Starbuck's Troy Plow, Rogers Nourse & Mason's Eagle Plow, and Wisconsin Plow, Grant's fanning mills, Riche's straw-cutters, corn-planter and sub-drill, washing machines, corn shellers, cultivators, thermometer charms, &c. &c.

...ALSO...

Agents for the sale of Wheeler's Patent Improved Portable Rail Road Horse Power and Over-shot Threshers and Separators.

myl

FFPARKER & BROTHER,
81 Woodward Avenue.



EMERY & CO.'S

N. Y. State Agricultural Society's first premium
RAILROAD HORSE POWER

AND

OVERSHOT THRESHER & SEPARATOR.

The attention of the farming public is solicited to the newly improved Railroad Horse Power, as now made by the subscribers. Also to their Overshot Spike Cylinder Threshers, with vibrating and Revolving Separators.

Having had much experience in the sale and manufacture of Horse Powers and other Agricultural Implements; and being acquainted very extensively with the wants of the farmers of this country, as well as the character of most of the implements and machines now in use, we think we hazard nothing in pronouncing our latest improved Powers far superior to any before made or sold by us, or with which we are acquainted.

At the late Fair of the New York State Agricultural Society, held at Albany, their committee on Horse Powers unanimously awarded us the highest premium for the best Rail Road Horse Power, among the large number of the most popular and approved kinds of the day, which were on exhibition and in competition—it being considered the most efficient and durable on the ground.

As the principal mechanical parts of its construction differ so materially from those mostly sold by us previously to the past season, as well as from all others now in use, we have thought it an object to the farmers, as well as for our own interest, to illustrate them by cuts and descriptions, as shown in previous numbers of the Farmer. The advantages of the recently adopted improvement are numerous and plainly seen, one of which is removing all the gathering and wearing parts to the outside of the Power, where it is free from dust and dirt, &c., and where it may be boxed up, requiring little time or oil to keep them in the best possible running order.

The liability of breakage and wear, and slipping of links and pinions, as in the rack and pinion powers, (add most others,) is wholly removed. In shipping them, the gears are taken off and packed in a box with other things.

Having sold a large number of the IMPROVED Machines the past harvest, all of which having given entire satisfaction, and when used side by side with the most approved of other kinds, having been preferred, we do not hesitate to recommend and warrant them equal, if not superior, to any before made or sold by us, or of which we have any knowledge.

Our Thresher consists of a small spiked cylinder, about fifteen inches in diameter, and twenty-six inches long, with a substantial spiked concave above this cylinder, which is adjustable to the work to be done. The feeding table being level, allows the feeder to stand erect, and is little annoyed with dust and dirt—and no possibility of hard substances getting into the Thresher, to its injury.

We attach a vibrating or revolving separator to them, which

serves to separate all the grain from the straw, and leave it with the fine chaff for fanning mill, while the straw is carried off for stacking.

Having heretofore been obliged to have a large portion of some parts of our work done by contract, we have felt the inconvenience and want of dependence to be placed upon the quality of materials and workmanship; we have now so extended our facilities, as to enable us to make all parts of all our own machines, and can now assure the public that none but the best work and stock will be offered by us.

The Two Horse Power Thresher and Separator is capable, with three or four men, of threshing from 150 to 200 bushels of wheat or rye, and the single one from 60 to 100 bushels, or double that quantity of oats per day.

The price for Emery & Co's One Horse Power, \$85 00
do Thresher & Separator, 35 00
do Bands, wrench, oiler and extra pieces, 5 00—\$125 00
do Two Horse Power, 110 00
do do Thresher and Separator, 35 00
do Bands, oiler, wrench, &c., 5 00—\$150 00

Price of Emery's Thresher and Cleaner, with bands, wrenches, &c., \$75 00
do Saw Mill, complete for use, \$35 00

Price of Grant's Fan Mills, adapted for hand or Power, from \$22 to \$28 00

Also Wheeler's Rack and Pinion Power, manufactured by ourselves, and warranted equal to any of the kind in use, [or made or sold by any other manufacturer,] which will sell with a full guarantee of the right of using same, in any territory of the United States, for the following prices:

One Horse Power, \$75
Two Horse Power, 100

The Threshers not being patented are same as above quoted. All the above are subject to the warranty of three months use and trial, and if not satisfactory may be returned and full purchase money refunded.

For further particulars see Illustrated Catalogue, furnished gratis on application to EMERY & Co., Original and sole Proprietors of the Albany Agricultural Works, Warehouse and Seed Store, No. 369, 371, Broadway, Albany, N. Y., and to D. O. & W. I. Penfield, Stove and Agricultural Store, 87, Woodward Avenue, Detroit. jy

AGRICULTURAL IMPLEMENTS.

A Large and increasing variety constantly on hand, at MANUFACTURERS' prices, adding transportation, among which are the following:

Starbuck's Premium Plows, 8 sizes, \$1 to \$18 00
Ruggles, No-tire, Mason & Co., do 3 to 14 00
Emery & Co., do 3 to 14 00
Emery & Co's Improved Railroad Horse Powers and Over-shot Threshing Machines and Separators, one horse \$145, two horse \$170

Wheeler's do, \$140 to \$165.
Smith's New Improved Ventilating Smut Machine and Buck wheat Sifter, \$10 to \$200.

Straw Cutters, from \$6 to \$17. Corn Shellers, from \$6 to \$20.
Emery's Corn Planter and Seed Drill, \$15. Vegetable cutters, \$13; Folding Harrows, 8 to \$20; corn and wheat cultivators, 5 to \$9; fanning mills; cast iron dirt scrapers, 4 to \$7; grind stones with rollers, 2 to \$10; churns, 1 50 to \$6; agricultural furnaces, 10 to \$30; cheese presses; hydraulic rams, 10 to \$30; wheel-barrow, 4 to \$6; well and cistern pumps, 3 to \$10; wheat drills; bush hooks and scythes, 1 50; Bog hoes, \$2; pruning knives, \$2; pruning saw and chisels, \$2; post spoons, \$1; screw wrench, 1 50 to \$5; Trucks, &c. &c., 3 to \$10.

Also, hay, straw, and dung forks, potato hooks, chisels, shovels, spades, grain cradles, scythes, rakes, hay knives, hoes, plow points, &c. &c.—all for sale cheap for cash.

D. O. & W. S. PENFIELD,
87 Woodward Avenue
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Back Volumes of the Farmer.

A few copies of the 6th, 7th, and 8th volumes of the Mich. Farmer, pamphlet bound and in boards, for sale at our bookstore.
C. MORSE & SON
Detroit, Feb. 1st, 1851. mar1

J. G. DARBY, ENGRAVER.

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Detroit, (Third Story.)

MAPS, Visiting and Business Cards, Portraits, Bills of Exchange, Wood Cuts, &c.

—ALSO—
Door Plates, Silver Ware, &c., elegantly engraved.
Detroit, January 1st, 1851.

SMITH'S Patent Ventilating Smut Machine—

Also, Mott's Agricultural Furnace, for sale by
D. O. & W. S. PENFIELD.
Detroit, Jan'y 1, 1850.

ONE PRICE ONLY!

1851.] Spring and Summer. [1851.

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At the well known establishment of the subscribers, corner of Jefferson and Woodward avenues, may be found a very large assortment of Clothing, comprising every quality and description of garments, which for style, durability and economy, cannot be excelled. FARMERS and MECHANICS may here procure substantial and economical garments; and as no deviation in price is practiced, they can rely upon purchasing goods, in all cases, at the lowest possible rates. Under this system the inexperienced can buy as low as the most expert and practiced buyer. Also on hand

BOYS' AND CHILDREN'S CLOTHING, in great variety, India rubber and oiled clothing, Trunks and CARPET BAGS, under garments, cravats, stocks, &c. &c.

Cloths, cassimeres and vestings, always on hand, and made up to order in the best manner. HALLOCK & RAYMOND
March 9, 1851.

Attention Soldiers and old Volunteers!!!

EACH of the commissioned and non-commissioned officers, Musicians or Privates, whether Regulars, Volunteers, or Militia, or the widow or minor children of those deceased, who actually served nine months in the war of 1812, or in any Indian wars since 1790, and each of the commissioned officers of the Mexican war, are entitled to 100 acres of land. Those who served four months are entitled to 80 acres. Those who served one month are entitled to 40 acres.

I will procure warrants for such as are entitled, by calling on me or writing to me. Business from a distance promptly attended to. Banking office next door to the Post Office, Woodward Avenue, Detroit, Michigan.

Letters must be post paid.

margin G. F. LEWIS, Exchange Broker.
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Paper Warehouse.

THE undersigned has opened an extensive Paper Warehouse, on Jefferson Avenue, Detroit, for the exclusive sale of all kinds of paper, where a general assortment can be found at all times. The attention of country dealers is respectfully invited, before purchasing elsewhere. Cash paid for rags.
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Detroit, Feb. 19, 1851.

KELLS' PREMIUM HORSE POWERS

And Threshing Machines.

THE New York State Agricultural Society, at their last Fair, awarded to the Horse Powers manufactured by the subscriber at the city of Hudson, the

First Premium.

They having been presented for competition by Messrs. Emery & Co. of Albany, who within nine months past have sold over 125 of these Powers.

The attention of Farmers throughout the country is therefore solicited to the Rail Way Horse Powers and Over Shot Threshing Machines with the Vibrating Separators as now manufactured by the subscriber,

Philip H. Kells,

Who is the first and original inventor of the present improved mode of constructing these Powers, and who has been constantly engaged in the manufacture and sale of Horse Powers, Threshing Machines, &c., for the last ten years. On this account, with his facilities for carrying on the business, and his knowledge of the wants of the Farmers of this country, he is satisfied he does and can execute this kind of work in a manner not to be excelled by any manufacturer in this country.

For the details of my mode of constructing the Rail-Way Horse Powers reference may be had to the advertisements and illustrations published by Messrs. Emery & Co. of Albany, in the Cultivator since June, 1850, at which time I commenced manufacturing for them.

All persons wishing to purchase Horse Powers or Threshing Machines of the latest and most approved construction are requested to call on, or forward their orders to the subscriber at his manufactory in State street, Hudson, or at Griffith's Long Wharf, Buffalo, N. Y.

Price of Machines.

For Two Horse Machines.....\$145 00
For One.....\$120 00

Machines will be shipped to any part of the United States or the Canadas, and warranted to give satisfaction to the purchaser, or may be returned within sixty days.

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PHILIP H. KELLS.

EAGLE & ELLIOTT,

DEALERS IN

CLOTHING.

Wholesale and for the Million!

KEEP constantly on hand as large a stock of Ready Made Clothing as may be found west of New York. Being of Philadelphia manufacture, and well suited for this market, they are prepared to sell at low prices, at wholesale or in quantities to suit purchasers. They beg leave to call attention to their

New Cloth Ware Room, second story.

French, Belgian, English, and American Cloths; cassimeres and trimming, serges, satins and vestings, making the best assorted stock of these goods to be found west of Buffalo; for sale wholesale or made to order, at their

Custom Department,

where every satisfaction as to fit, style, &c., is warranted, and at reasonable prices. EAGLE & ELLIOTT,
61 Woodward Avenue, nearly opposite Presbyterian church, Detroit. Jan

MICHIGAN BOOKSTORE.

THE SUBSCRIBERS having rented the new and commodious store adjoining the Young Men's Hall, on Jefferson Avenue, are now opening one of the largest stocks of BOOKS & STATIONERY,

To be found west of New York. Their assortment includes LAW, MEDICAL, THEOLOGICAL, MISCELLANEOUS, CLASSICAL, and SCHOOL BOOKS. All of which are offered to the public, wholesale or retail, at prices much lower than heretofore. They also carry on the Book Binding business, and are prepared to manufacture to order, County and Town Record Books, Merchants' Ledgers, Journals, Day Books and other kinds of Blank Work generally, of the best materials and workmanship. Pamphlets, Magazines, &c. bound with neatness and dispatch. A share of public patronage is respectfully solicited.
Detroit, Jan 1, 1851. Jan C. MORSE & SON.

T. H. ARMSTRONG,

Manufacturer of and Dealer in

SUPERIOR HATS AND CAPS,

No. 53, Woodward Avenue,

(Between the Presbyterian Church, and Jefferson Avenue,
Sign of Big Hat, Detroit.

ALSO, Dealer in Furs, Robes, Muffs, Umbrellas, Canes, Gloves, Scarf, Cravats, Suspenders, Buckskin Gloves, &c., very cheap for cash.

Would respectfully solicit the patronage of Farmers and others coming into the city, pledging himself to sell as cheap as any other establishment east of New York.

His stock of Hats and Caps are of his own manufacture and warranted the best.

Orders for any style of Hat or Cap promptly attended to.

CHARLES PIQUETTE,



MANUFACTURER OF

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Also, damaged Watches and Jewelry, repaired by a superior workman, and the work warranted.
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Office next door to Markham's Book Store, opposite Maj. Kearsley—entrance same as that of the Daily Advertiser.